Technical Report 1150

Year 1 Assessment of the Unit Focused Stability Manning System

Monte D. Smith L-3 Communications

Joseph D. Hagman U.S. Army Research Institute

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14. ABSTRACT (Maximum 200 words The U.S. Army Alaska's 172nd Stryker Brigade Combat Team (SBCT) is currently serving as the test unit for implementation of the newly developed Unit Focused Stability (UFS) manning system. Under UFS, combat forces are formed, trained, and deployed as intact units, with resulting stability and opportunity for accretive training serving to increase combat skills and cohesion above levels normally achieved in conventionally manned units. During the 172nd SBCT's anticipated operational cycle, the impact of UFS will be formatively assessed to determine (a) the long-term impact of personnel stabilization on unit cohesion, (b) factors/conditions that enhance or detract from this cohesion, and (c) stabilization-related lessons learned for improving future UFS implementation. Assessment methods will include the use of surveys, interviews, and focus group discussions. Results from this first year revealed robust levels of cohesion and unit climate variables in spite of widespread concerns that UFS might negatively impact senior NCO and junior officer career progression. Major recommendations for improvement of UFS implementation included: (a) proactive distribution of comprehensive UFS ground rules, and (b) mitigation of UFS' perceived negative impact on career progression. Next year's assessment efforts will focus on platoon-level measurement of personnel external (i.e., unprogrammed losses/gains) and internal (i.e., duty position changes) turbulence and determination of the relation between turbulence and unit cohesion.

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In October of 2002, the Vice Chief of Staff of the Army created Task Force Stabilization (TFS) and charged it with the mission to develop a unit-based manning system capable of reducing the personnel turbulence levels of combat units operating under the current individual-based replacement system (IRS). In response, TFS has developed a Unit Focused Stability (UFS) manning system that, unlike under IRS where individual Soldiers are swapped in and out of units on a daily basis like "spare parts," enables Soldiers to assemble, train, and deploy together (i.e., remain stabilized) throughout the operational cycle of their unit.

Although the resulting heightened personnel stability under UFS is expected to foster cohesion over time and, in turn, enhance unit operational capability, the results of past longitudinal investigations into the relation between stability and cohesion have been inconclusive. As a result, TFS has asked the U.S. Army Research Institute (ARI) to assess the long-term impact of personnel stabilization on cohesion, identify factors that enhance or detract from this cohesion, and document lessons learned for improving future UFS implementation among Modified Table of Organization and Equipment (MTOE) units. The focus of this planned multiyear assessment is the U.S. Army Alaska's (USARAK's) 172nd Stryker Brigade Combat Team (SBCT), the first unit to undergo transition from IRS to UFS.

Year 1 of the assessment has focused on (a) reviewing past research on the relation between personnel stability and unit cohesion, (b) developing survey instruments for examining the nature and extent of this relation, as well as the impact of related factors (e.g., leadership) on the development and maintenance of cohesion over time, (c) analyzing initial survey data to establish baseline levels from which to assess cohesion changes that may occur over the 172nd SBCT's operational cycle, and (d) developing and conducting interviews designed to augment survey findings and identify Soldier/leader-perceived pros and cons of initial UFS implementation within the 172nd SBCT. The present report describes results to date.

This work is sponsored by Human Resources Command (HRC) and USARAK under Memorandum of Agreement "Unit Focused Stability Assessment." Findings have been presented to Commander, HRC; Commander and Chief of Staff, USARAK; Commander, 172nd SBCT; Chief, G1 Plans Division, Department of the Army.

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YEAR 1 ASSESSMENT OF THE UNIT FOCUSED STABILITY MANNING SYSTEM

EXECUTIVE SUMMARY

Research Requirement:

Conduct a multiyear (longitudinal), formative assessment of the U.S. Army's initial implementation of a unit-based system of personnel manning (Unit Focused Stability [UFS]) designed to decrease personnel turbulence in combat units. Objectives of the assessment included identification of (a) the long-term impact of personnel stabilization on unit cohesion, (b) factors/conditions that enhance or detract from this cohesion, and (c) stabilization-related lessons learned that can be used to enhance future UFS implementation.

Procedure:

The initial UFS implementation unit, the 172nd Stryker Brigade Combat Team (SBCT), will be assessed at approximately 6-month intervals throughout its 36-month operational cycle using a coordinated battery of surveys, interviews, and focus group discussions designed to (a) examine the nature and extent of the relations among personnel turbulence, unit cohesion, and related unit climate variables, (b) identify Soldier/leader-perceived pros and cons of UFS manning system operational implementation, and (c) establish baseline levels from which to assess cohesion changes during the 172nd SBCT's operational cycle. This report contains first year results. Multi-dimensional cohesion scales (Siebold, 1996; 1999; Siebold & Kelly, 1988a, 1988b) were used to assess horizontal, vertical, organizational, social and task sub-dimensions of both leadership team cohesion (LTC) and Soldier cohesion (SC).

Findings:

172nd SBCT personnel expressed the need for more information at the inception of UFS implementation in order to make better-informed career decisions. Senior NCOs and junior officers were concerned that UFS would have a negative impact on career progression. Nonetheless, Soldiers and leaders alike were convinced that stabilization would have positive impacts on unit cohesion, training, and family unity. Initial cohesion levels, and other unit climate variables such as leader effectiveness and Soldier job motivation, were notably robust overall. No differences were observed between horizontal (i.e., Soldier-to-Soldier) and vertical (i.e., Soldier-to-leader and vice versa) cohesion, possibly an outcome of stabilizing both Soldiers and leaders.

Officers were typically more positive on key variables, followed by NCOs and then junior enlisted Soldiers. All personnel, however, leaders and Soldiers alike, evidenced a strong work ethic and reported working in a supportive environment with clear rules, caring leaders, and established values where encouragement to focus on teamwork was the norm. One issue, nonetheless, consistently emerged as a problem: housing and other family-related well-being

issues. Among both Soldiers and leaders, personal well-being was the most highly rated unit climate variable and family well-being was the lowest rated.

Use of Findings:

The cohesion levels found during this first assessment year will be used as benchmarks against which to identify the long-term impact of personnel stabilization and related variables (e.g., leadership effectiveness, unprogrammed turbulence, duty position changes) over time. In addition, identified UFS transition-related lessons learned this year will assist the Army in future efforts to implement UFS within other Modified Table of Organization and Equipment (MTOE) units.

YEAR 1 ASSESSMENT OF THE UNIT FOCUSED STABILITY MANNING SYSTEM

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Year 1 Assessment of the Unit Focused Stability Manning System

Introduction

In the aftermath of the Vietnam War, the U.S. Army's Individual Replacement System (IRS) of personnel manning came under sustained criticism. In place at least since 1917 (Johns, 1984), IRS was based on concepts and practices drawn from industrial mass production (Furukawa, et al.,1987) and essentially treated Soldiers as "spare parts." Soldiers were replaced within units whenever their enlistments expired, or transferred between units as needs dictated, with little thought for how a continuous stream of transfers into and out of units (personnel turbulence) could complicate training, disrupt group dynamics, and ultimately undermine unit cohesion. Personnel turbulence was thought to be especially problematic within combat units, where a minimum amount of time together as intact, functioning teams (prior to initiation of combat operations) is considered a prerequisite for development of the friendship and trust bonds that serve as a necessary foundation for effective combat performance (Yagil, 1995). Excessive personnel turbulence in Vietnam, for example, (attributed in part to IRS) was cited by several investigators as a principal factor contributing to low cohesiveness within combat units (James, Ploger, Duffy, & Holmes, 1983; Elder, 1988; Scull, 1990; Vaitkus, 1994).

In retrospect, some version of IRS can be seen as an inevitable product of its time. IRS incorporated elements of scientific respectability, including Operations Research/Systems Analysis (OR/SA), Planning, Programming and Budgeting System (PPBS), and Automatic Data Processing Systems (ADPS), and applied these techniques to the unwieldy domain of personnel management (Johns, 1984). Scientific principles already had been enormously successful when applied to industrial operations and there was every reason to believe the same would be true in the realm of personnel management operations. Thus, IRS was scientifically sound and coldly efficient and had the concept been used to replace cogs in some vast industrial machine it may have been the perfect resource management tool. When employed in the service of personnel replacement within the U.S. Army, however, IRS produced an unintended side effect, excessive turbulence, so disruptive that it eventually was identified as a principal cause of weakened unit cohesion. Ever since the seminal work of Shils and Janowitz (1948), moreover, group cohesion consistently has been cited as a key factor in determining military performance (Manning & Ingraham, 1987; Oliver, Harman, Hoover, Hayes, & Pandhi, 1999; Siebold, 1999). Not surprisingly, the Army soon initiated systematic investigations of alternative manning systems.

In 1981, the Army instituted the Unit Manning System (UMS) in an effort to reduce turbulence within combat units and simultaneously foster cohesiveness by keeping Soldiers together in the same unit for longer time periods. It was widely believed that if unit turbulence could be curtailed and personnel stabilization achieved, group cohesion would logically result and enhanced combat effectiveness would ensue. Initially, the Army's principal mechanism for implementing UMS was the Cohesion, Operational Readiness, and Training (COHORT) program. At least four different COHORT models eventually were evaluated (Vaitkus, 1994), but they had in common the idea of forming and maintaining combat arms units for an extended period of time so that members of these units would have ample opportunity to bond and coalesce into efficiently functioning teams. These teams, in turn, could then be deployed as intact groups.

Much of the empirical evidence concerning the cohesive effect of personnel stabilization in the Army came from evaluations of COHORT units (e.g., Ardison, et al., 2001; Bartone, Harrison, et al., 1986; Elder, 1988; Frame, Cehrlein, & Captain, 1986; Furukawa, et al., 1986; Marlowe, et al., 1985; Thurman, 1989; Vaitkus, 1994). Although personnel in COHORT units were stabilized in a variety of ways and for varying periods of time (Vaitkus, 1994), a common outcome was enhanced small unit cohesion (Furukawa, et al., 1987). Stabilized units, moreover, consistently scored higher than nonstabilized units on measures of psychological readiness for combat and were better able to resist the potentially corrosive effects of mission rotation, leader turbulence, changes in equipment, changes in fighting doctrine, and organizational reconfiguration. Stabilized units also showed enhanced potential for family unit bonding and were better able to perform collective tasks and sustain themselves under stress than conventional units. Additionally, leaders rated stabilized units as consistently better at movement, maneuver, occupation, and communication at small unit levels (platoon, company) than their IRS-manned counterparts (Furukawa, et al.).

Although the Army abandoned the original COHORT concept in 1986 (George & Lee, 1987) and replaced it with a variety of "package" replacement systems (Scull, 1990), the ideas of personnel stabilization, unit cohesion, and combat effectiveness were destined to return, especially in an era when highly mobile, instantly deployable, and highly cohesive combat units are increasingly seen as a critical determinant of the United States' ability to protect itself and contribute to world order. Accordingly, the Army is currently committed to transitioning its combat units from an IRS- to a UMS-based personnel management model. In 2004, moreover, UMS was changed to Unit focused Stability (UFS) to emphasize the key role of personnel stabilization in the new model (Task Force Stabilization, 2004). The central idea of UFS is that combat forces will be formed, trained, and deployed as intact units, and the resulting stability and opportunity for accretive training will increase tactical skills above levels normally achieved in conventional units where personnel turbulence necessitates repetitive training as transferring Soldiers are continuously replaced by new Soldiers throughout the unit's operational cycle. In this view, the change from IRS to UFS is expected to produce heightened personnel stability, strong Soldier bonding, greater opportunity for cumulative/accretive training, increased unit cohesion, and enhanced combat effectiveness.

The Underlying Model

The underlying model behind UFS can be represented as follows:

 $UFS \rightarrow Personnel\ Stability \rightarrow Bonding \rightarrow Cohesion \leftrightarrow Desirable\ Outcomes$

UFS is designed to promote personnel stability, which in turn is assumed to facilitate bonding between and among Soldiers. The bonding process, in turn, is thought to result in higher unit cohesion which results in desirable outcomes such as enhanced combat readiness/performance (Oliver, et al., 1999; Mullen & Copper, 1994). Evidence suggests, moreover, that enhanced performance may in turn lead to even greater cohesion (Mullen & Copper, 1994), producing a feedback loop. Thus, the final arrow in the model above is bidirectional (↔) indicating that in all probability cohesion and performance mutually affect each other.

UFS and Personnel Stability

Some linkages in the model are almost axiomatic. When UFS is implemented, for example, some degree of personnel stability logically results. How much stability, however, is a matter to be determined. As shown by the various COHORT evaluations (Vaitkus, 1994), personnel stabilization can be implemented in a variety of ways across varying periods of time. Moreover, while Soldier stability often was accomplished under COHORT, officer turbulence usually was left unchecked. In contrast, under UFS both Soldiers and officers are stabilized (e.g., Task Force Stabilization, 2004, March 16; May 1).

Personnel Stability and Bonding

The third term in the model, bonding, is the process by which stabilized personnel transform into internally supportive and cohesive work and combat teams. Ever since the early work of Shils and Janowitz (1948), investigators have emphasized that small unit (squad, platoon) bonding processes are key to understanding how cohesion develops (Johns, 1984; Moskos, 1969; Yagil, 1995) and that the small group is the appropriate level to measure cohesion (Siebold, 1999). Relative to large groups, small groups are thought to exert greater control over individual behavior (Johns, 1984). Also, the linkage between cohesiveness and performance is stronger in small groups (Mullen & Copper, 1994). It is within these small groups that the majority of social and professional interaction occurs for enlisted Soldiers. It is here that the important elemental bonding processes must occur (Ozkaptan, 1994). It is within small groups or units that Soldiers build enduring friendships, some of which will strongly influence their actions during subsequent stressful combat operations.

From Bonding to Cohesion

Bonding and cohesion development, then, appears to be a bottom-up process. Although command support is critical, and although unit cohesion may wither and die in the absence of good leadership, the literature consistently suggests that cohesion development is fundamentally a grassroots phenomenon (Shils & Janowitz, 1948; Siebold, 1999).

Cohesion and Desirable Outcomes

In recent years, cohesion has been the focus of increased research (Siebold, 1999). It is widely believed that highly cohesive groups will outperform less cohesive groups, especially under adverse conditions such as the high stress encountered under combat conditions (Bartone & Kirkland, 1991; Bartone, Marlowe, Gifford, & Wright, 1992; Yagil, 1995). Empirical evidence supports this widespread supposition. Oliver, et al. (1999) reported a meta-analytic examination of 39 investigations that employed a variety of cohesion measurement techniques and a correspondingly diverse set of outcome measures. When these diverse measures were transformed to a common metric, effect sizes (i.e., correlation coefficients) weighted by number of participants were r = .40 for cohesion and group performance and r = .20 for cohesion and individual performance. Positive relations were also reported between cohesion and retention, well-being, and readiness, with r = .22, .24, and .30, respectively. The investigators concluded that group cohesion "...results in desirable outcomes for the military..." (p. 57).

Oliver, et al. (1999) confined their meta-analysis to military groups. Mullen and Copper (1994), in contrast, examined results from both military and nonmilitary groups using a total of 66 different samples. They reported a significant cohesiveness-performance effect, with a mean r of .248 across the 66 samples. Forty-three of the 66 investigations included in their meta-analysis used correlational paradigms while the other 23 used experimental paradigms. The cohesiveness-performance effect was manifest significantly under both paradigms, though it was stronger under the correlational paradigm. The effect also was stronger within smaller groups and within real groups versus artificially constructed laboratory groups.

Thus, the preponderance of evidence supports a cohesiveness-performance linkage. Based upon scores of studies both inside and outside the military, cohesive groups perform better than less cohesive groups, all other factors held constant. The relatively low strength of this linkage, with mean r values ranging mostly in the .20's and .30's, should not be too surprising given the diverse measures of both cohesion and performance employed in the more than 100 investigations examined through the meta-analytic techniques of Mullen and Copper (1994) and Oliver, et al. (1999). With the diverse measures used to capture both constructs, and with the methodological variety employed in the examined investigations, the consistent meta-analytic findings lend strong support to the thesis that the cohesion-performance linkage exists and may even be robust. Although the jury is still out concerning the causal directionality of the cohesion-performance relation (Mullen & Copper, 1994; Siebold, in publication), the linkage between these two variables is reasonably well established.

Perhaps more investigations have focused on the relation between cohesion and performance than on any other aspect of cohesion in the group dynamics context, but a variety of attitudinal, dispositional, and emotional outcomes have been associated with cohesion as well, in both military and civilian groups. These outcomes include well-being (Oliver, et al., 1999), psychological health and well-being while undergoing combat stress (Bartone, et al., 1992), eagerness to win athletic contests (Carron, 1982), improved morale and enhanced motivation (Gal, 1986), psychological readiness for combat, reduced battlefield trauma, and *esprit de corps* (Furukawa, et al., 1987).

Variables Influencing the Development of Cohesion

Most investigations of the relation between cohesion and performance, or of the relation between cohesion and emotional/affective variables such as readiness to fight, have treated cohesion as an independent variable and assumed that it either causes changes in other (dependent) variables or could cause changes if cohesion levels could be manipulated and the effects observed. Other investigations, however, have examined conditions that facilitate the development of group cohesion. These investigations have examined a variety of potential influences with varying degrees of success.

Interaction Patterns Within Small Groups

Length of time together within a group is thought by some to facilitate the development of cohesion (e.g., Johns, 1984). In contrast, there is evidence to suggest that cohesion levels may

naturally wax and wane during a lengthy duty assignment (Bartone & Adler, 1999; Henderson, 1990; Siebold, 1989; Siebold, 1996; Vaitkus, 1994; Yagil, 1995) and even during the ordinary course of initial entry training and subsequent integration into active duty assignments (James, et al., 1983). In fact, cohesion's life cycle has not been satisfactorily specified. "Indeed, it is ... not clear how long it takes for a high degree of cohesiveness to develop in a group or how long it takes a group to disintegrate." (Siebold, 1999, p. 22) Some degree of personnel stability may be necessary but, by itself, probably is not sufficient to ensure the development of cohesion (James, et al., 1983).

Frequency of interaction of small group members may influence the development of cohesion. Johns (1984) argued that more interaction provides more opportunities for bonding. In contrast, Mullen and Copper (1994) reported that groups with intense interaction did not exhibit stronger cohesiveness-performance effects. Moreover, Bartone and Adler (1999) reported that some military groups (physicians, military police) were better able than others (nurses, emergency room personnel) to maintain cohesiveness through long periods of forced idleness. Presumably, interaction opportunities would be reduced during periods of idleness. Hence, the amount of interaction required for bonding to occur may differ substantially for different kinds of military groups.

Other factors

Other factors that may influence the development of small unit cohesion include the degree to which interpersonal relations within the group are satisfying (Elder, 1988; Gal, 1986), homogeneity of group attitudes and/or values (Johns, 1984), congruence between/among individual, primary group, and organizational values (Yagil, 1995), effective communication and mission clarity (Bartone & Adler, 1999) and degree of group structure (Henderson, 1985; Yagil, 1995). Shils and Janowitz (1948) emphasized that military groups must fulfill individual Soldiers' physical, emotional, and status needs in order for cohesion to flourish. Thus, it might be concluded that cohesion will flourish when a group successfully fulfills the needs of its individual Soldiers for (a) basic food and supplies, (b) affection and esteem from both leaders and peers, (c) a sense of power, and (d) mediation (and regulation) of Soldiers' relations with higher authority.

Leadership

Two of the four basic requirements for achieving cohesion posited by Shils & Janowitz (1948) hinge directly on the presence and actions of effective leaders. Thus, small unit cohesion is communicated upward and outward by leaders, who become linchpins of the cohesion development process, connecting, through their actions, individual primary groups (squads, platoons) with larger organizational units. Perhaps more than any other variable, effective leadership repeatedly has been implicated as crucial to the development and maintenance of unit cohesion (Furukawa, et al., 1987; Griffith, 1985; Ingraham & Manning, 1981; Kirkland, Bartone, et al., 1992; Marlowe, et al., 1985). Johns (1984, p. 33) stated the matter succinctly: "In all the literature, the one constant is the finding that leadership is the most critical element in achieving cohesive, effective organizations." Good leadership facilitates the development of group cohesion (Henderson, 1985) and may be a crucial prerequisite for its initial development (James,

et al., 1983), though anecdotal evidence also suggests that Soldiers occasionally will pull together against a particularly inept leader (Rosen & Moghadam, 1988), as if determined to form a cohesive unit in spite of the leader's ineptitude. The key to this occurrence may be strong leadership within the primary group, or else the availability of an alternative leader whom the Soldiers can adopt as a surrogate (Ambrose, 1996). Nonetheless, leadership must receive close attention in any systematic examination of small unit cohesion development and maintenance.

The Development and Maintenance of Cohesion

Even though the importance of cohesion has been recognized for more than half a century (Shils & Janowitz, 1948), surprisingly little is known about its antecedents and usual pattern of development (Bartone & Adler, 1999). It is known that Soldier-to-Soldier bonding in primary groups is at the heart of the process and that bonding occurs only when groups are stabilized for some minimum, but unknown, period of time. Also, fulfillment of individual Soldiers' basic needs within groups is a prerequisite for the development of high levels of cohesiveness, and good leadership facilitates the process (Furukawa, et al., 1987). Beyond these basics, things are surprisingly murky, even concerning the key variable of effective leadership. Although good leaders facilitate the development of cohesion in all settings, and probably are required in order for cohesion to expand from the small unit upward and outward to the larger organization, it is nonetheless likely that cohesion can occur, at least to some extent, even in the presence of bad leadership.

Knowledge concerning the normal process of cohesion development over time is particularly sketchy. For example, how long must Soldiers be stabilized in small units before the cohesion process can work its course? Does the process happen automatically soon after stabilization or are there key events that trigger its development? Are there events that can stymie its development? Must units be completely stable for some critical time period, or is some degree of turbulence permissible? How much turbulence can be tolerated? How much more cohesion will result from UFS versus what would have occurred under IRS? Other than personnel stabilization, what else can be done to facilitate the development of cohesive groups? Does group cohesion inevitably deteriorate after some unknown period of time, or can it be maintained indefinitely with good leadership and the right cohesion maintenance schedule? What is the proper maintenance schedule, and where should a cohesion mechanic apply the "grease" of effective maintenance? And for that matter, what is cohesion "grease?"

Linear Patterns of Cohesion Development

Surprisingly little is known about how cohesion develops within primary units. Perhaps this should not be surprising, given the relative scarcity of longitudinal investigations in this area. Most investigations have consisted of cross-sectional "snapshots" conducted at one point in time (Griffith, 1985; Manning & Ingraham, 1987; Marlowe, et al., 1985) with little if any attention given to developmental patterns or identification of facilitative or inhibitory factors (Bartone & Adler, 1999). The few longitudinal investigations that have been conducted suggest that cohesion building is a dynamic process and that substantial fluctuations in cohesion may occur across a unit's normal operational cycle (Bartone & Adler, 1999). Nonetheless, findings from longitudinal investigations so far have been inconsistent, and even contradictory. The most

commonly reported pattern is that cohesion seems to begin high and progressively deteriorate over time. Henderson (1990) reported declines in cohesion measures in COHORT units across a 12-month period. Vaitkus (1994) reported declines over periods of from 6-14 months in infantry, armor, and field artillery units. Neither investigator offered an explanation for the observed declines, however.

Siebold (1996) also reported significant declines in cohesion over time (as well as declines on a variety of related leadership and motivation variables). Based on data collected during a 6-month Sinai peacekeeping mission in a light infantry unit, progressive declines occurred across four measurement occasions, two taken during predeployment train-up at Fort Bragg and two others near the end of the mission. Siebold called this pattern of declining values a "mission effect," and attributed it to mission burnout, or entropy, created by the unusually harsh environmental conditions and isolation of the Sinai Desert, conditions that included long periods of confinement with resulting boredom. Whatever the cause, observed declines were substantial. Cohesion among leaders dropped 25%, mission motivation dropped 24%, and squad member cohesion dropped 13%.

Nonlinear Patterns of Cohesion Development

In contrast to the progressive declines observed among Sinai peacekeeping troops, Siebold (1989, as cited in Bartone & Adler, 1999) reported U-shaped patterns among COHORT units, where cohesion began high, dropped in midcycle, but rebounded somewhat toward the end of their unit life cycle. Siebold attributed the initially high levels to a "honeymoon" effect, where Soldiers were inclined to see things more positively at the beginning of an operation.

Yet another nonlinear sequence of longitudinal cohesion measures was reported by Bartone and Adler (1999), but this time the observed pattern consisted of an inverted U-shape, "... starting out low, reaching a high point around mid-deployment, and then decreasing again toward the end of the mission." (Bartone & Adler, 1999, p. 85). This inverted U-shape pattern occurred within a newly constituted Army medical task force on a 6-month peacekeeping assignment in the Balkans. Cohesion data were collected near the beginning, middle, and end of the mission. Subgroup cohesion differences also occurred, with physicians and military police registering the highest levels of cohesion and nurses and technicians the lowest. Another finding was that different unit climate variables related to cohesion at different times during the unit's relatively brief mission. Confidence and trust in leaders correlated with cohesion in the early stages of the mission. Confidence in fellow Soldiers, along with mission success, were better predictors of cohesion as the mission progressed. And toward the mission's latter stages, cohesion was again highly related to confidence in leaders along with trust that Soldiers' families were being cared for by the Army.

Thus, at least three distinct patterns have been reported when cohesion was measured longitudinally over time in military units. Perhaps the most commonly reported pattern consists of progressive deterioration in cohesion across the unit's normal life cycle. This pattern was observed in 3-year COHORT cycles (Henderson, 1990; Vaitkus, 1994), as well as during a 6-month peacekeeping mission to the Sinai (Siebold, 1996). Both U-shaped (Siebold, 1989) and inverted U-shaped patterns (Bartone & Adler, 1999) were reported as well, but neither has been

convincingly explained. Conspicuously missing, moreover, is the longitudinal pattern that might be logically expected to occur based on our best understanding of the cohesion development process, and that would consist of a progressive increase in cohesion levels as Soldiers spend more and more time together in the same unit, presumably building and strengthening bonds that form the basis for strong unit cohesion.

Perhaps the sole commonality among reported longitudinal patterns of cohesion development is that they have been dynamic. In not a single instance have cohesion measures increased monotonically when measured longitudinally. Given the presumed importance of group cohesion and its demonstrated fluidity, it is imperative that we gain a better understanding of both its normal developmental pattern and of factors that may be responsible for influencing it during a military unit's typical life cycle. Evidence to date suggests that cohesion is a highly dynamic process, fully capable of exhibiting not only statistically significant but also practically meaningful fluctuations over time.

Definition and Measurement of Cohesion

Cohesion is not a new concept. It has been studied and discussed by historians, military strategists, sociologists, field theorists, sociometrists, leadership theorists, sport psychologists, and social psychologists, among others. (See Siebold, 1999 for a summary of efforts to define, operationalize, and measure the concept.) Insight into the contemporary meaning of cohesion can be gained from an examination of the word's origin. As Siebold (1999) points out, the English word "cohesion" comes from two Latin words, *cohaerere*, meaning to stick together, and *cohors*, an enclosure or court, from which was derived the term cohort, a light infantry battalion-sized unit of 400 to 500 men, about one tenth of a Roman legion. Little wonder, then, that military strategists and theorists have found cohesion such a useful concept. Its very origin traces to the structure and function of vaunted Roman legions. At least since Shils and Janowitz (1948) cohesion has been cited as the key to realizing optimum small unit performance, especially among military combat units.

Despite all this attention, cohesion has proven to be easier to understand in the abstract than to grasp (and measure) in the concrete, partly because a consensus definition has not emerged (Siebold, 1999). Every major researcher or theorist studying the phenomenon has tended to advance yet another definition. Nonetheless, definitions tend to describe a process wherein group members stick together, look out for one another, and work for common goals, especially in the face of adversity. Johns (1984, p. 4) gave the following definition to describe the cohesion process as it is manifest within military units: "the bonding together of members of an organization or unit in such a way as to sustain their will and commitment to each other, their unit, and the mission."

Early thinking about cohesion regarded the construct as global in nature, treating cohesion as a unitary construct. Carron and Chelladurai (1981), however, distinguished between "individual-to-group" cohesion and "group-as-a-unit" cohesion. The former has come to be known as social cohesion or the extent to which an individual is attracted to other group members, and the latter as task cohesion or the group's ability to work together to attain common goals (i.e., teamwork). Both processes, however, were examples of peer-group bonding and failed to recognize the

bonding processes that occur between Soldiers and Leaders or between Soldiers and larger organizational units.

Siebold (1996; 1999; Siebold & Kelly, 1988a; 1988b) developed a cohesion model that recognized the Carron and Chelladurai's (1981) social vs task distinction and incorporated additional components as well. Siebold's work was based on the conviction that "measuring cohesion in terms of only peer-group bonding seriously under represents the construct. Bonding between leaders and subordinates and between the group members and the unit as a whole must be included to fully represent military unit cohesiveness." (Siebold, 1999, p. 18). He used horizontal cohesion to represent traditional peer-group bonding, and introduced vertical and organizational cohesion to represent, respectively, bonding between leaders and subordinates and between group members and the unit as a whole. In his model, horizontal cohesion occurs at the Soldier-to-Soldier level, and can be thought of as the moral and emotional cement necessary to bond together members of a fighting unit during moments of intense combat stress. Some writers consider horizontal cohesion (and the bonding processes that underlie it) to be the most basic form of cohesion, and it may be a prerequisite for higher-level cohesive processes to occur (Johns, 1984).

For cohesion to transcend individual small units and effectively diffuse throughout the larger organization, vertical cohesion also must occur, consisting of a bonding process from Soldier-to-leader (and vice-versa). Vertical cohesion depends critically on effective leadership (Elder, 1988). Elder stated, for example, that leaders serve as liaisons between Soldiers and higher-level organizational units, and to function effectively leaders must be seen by the Soldiers under their command as competent, caring, and committed to the mission. If both horizontal and vertical bonding occur, then organizational bonding, the final plank in the multidimensional cohesion platform, is presumed to follow.

Table 1 distills Siebold's (1999) ideas. The three dimensions of cohesion (horizontal, vertical, and organizational) are listed in the left column. Each dimension of cohesion presumably has both a social and task component, represented in the next two columns. For example, horizontal cohesion can produce both peer bonding (the camaraderie aspect of small unit cohesion) and teamwork (the ability to work together to get a job done). Both vertical and organizational dimensions also have corresponding social and task components. The highest level of cohesion, organizational, occurs when Soldiers identify with their unit and work to achieve its goals in exchange for organizational assistance in achieving their individual needs and goals.

Table 1
Siebold's (1999) Multidimensional Cohesion Model

Cohesion Dimension	Social Component	Task Component
Horizontal	Peer Bonding	Teamwork
Vertical	Leader Caring	Leader Competence
Organizational	Pride and Shared Values	Attainment of Needs and Goals

Siebold (1996) defined cohesion as "the degree to which the forces of social control, internal and external to individual group members, maintain a pattern of relationships among the members which allows the group to accomplish its mission" (p. 240) Siebold has consistently

emphasized the importance of the primary reference group in the formation and maintenance of cohesion, and although cohesion is most often measured at the level of the individual Soldier, individual scores usually are aggregated to the level of the primary reference group for purposes of data analysis (Siebold, 1999).

Siebold and Kelly (1988a; 1988b) have developed scales designed to measure all components of cohesion represented in their model (i.e., horizontal, vertical, and organizational, each of which contains social and task subcomponents). A review of military cohesion literature (Smith & Hagman, in press) revealed that Siebold's model and measurement scales are the most advanced currently available. Accordingly, these scales were adapted for data collection in the present assessment.

UFS, the 172nd Separate Infantry Brigade (SIB), and the 172nd Stryker Brigade Combat Team (SBCT)

In view of the perceived importance of unit cohesion and the central role that personnel stability plays in its development and maintenance, the U.S. Army has committed to develop, evaluate, and implement UFS. The developed model will then be applied to all brigade-sized combat units throughout the Army. The 172nd SIB in Alaska was selected as the UFS test case concurrent with its transition to the 172nd SBCT. It should be noted that the SBCT transformation was never considered to be part of UFS implementation, nor vice versa. The 172nd was already scheduled for SBCT transformation when it was selected as the UFS implementation test unit.

UFS was designed to decrease personnel turbulence and set conditions for increased unit cohesion, readiness, and combat effectiveness through force stabilization. Unlike earlier COHORT implementations, UFS was designed to stabilize both Soldiers and officers in order to promote the development of all dimensions of cohesion: horizontal, vertical, and organizational. Personnel stabilization and reduced personnel turbulence within the 172nd SBCT will be accomplished through synchronization of individual Soldier assignments with the unit's operational cycle, with the expectation that these steps will increase unit cohesion. Whereas IRS would entail continuous "in and out" personnel processing, UFS will use a combination of "cyclic regeneration" and "life cycle regeneration" to build an intact unit, constrain personnel losses within the first operational period to within 10-30% of unit strength, and then set aside a period of from 2-4 months to regenerate (i.e., fill these losses and make duty position changes). Time between successive unit regenerations is expected to vary from 8-14 months depending on the unit's mission and operational requirements. During the 2- to 4- month regeneration windows, replacement Soldiers will be integrated into the unit by experienced Soldiers who have remained in the unit.

The 172nd SBCT will be assessed at approximately 6-month intervals throughout its 36-month operational cycle. Assessment efforts will have three main objectives: (1) to determine the effects of personnel stability (and related variables) on small-unit cohesion, (2) to identify variable relations and predictive capabilities, including the development of models to predict unit cohesion, and (3) to identify pro and con lessons learned that will facilitate future UFS implementations. Assessment efforts will incorporate survey, interview, and focus group

methods of data collection. Measurement of both cohesion and personnel turbulence will be focused at the small unit (platoon) level. Other objectives of the assessment include the identification of factors/conditions that enhance or detract from cohesion development, identification of correlates of cohesion at different stages of the unit's operational cycle, clarification of leadership influences upon cohesion, specification of the longitudinal pattern(s) of cohesion development, identification of conditions that may trigger deterioration in cohesion levels, and examination of the relation between degrees of personnel turbulence and resulting fluctuations in cohesion at the platoon level within the 172nd SBCT.

This report, the first in a planned series, presents a summary of initial findings for the 172nd SBCT based on data collected in the early stages of the unit's formation. Later reports will expand and extend these initial findings, introduce information on patterns of cohesion development, and explore the turbulence-cohesion relation as it evolves over time. The theme throughout this anticipated series of reports will be to learn more about conditions sufficient for the creation, augmentation, and maintenance of unit cohesion, while tracking the relation between personnel turbulence and cohesion within platoon-sized units of the 172nd SBCT. Although a substantial literature exists concerning past personnel stabilization efforts (e.g., Furukawa, et al., 1986; Furukawa, et al., 1987; Kirkland, 1987; Kirkland, Furukawa, Teitelbaum, Ingraham, & Caine, 1987; Thurman, 1989; Tremble, Brosvic & Manigiardi, 1986; Vaitkus, 1994), much remains to be learned.

Method

Leaders of the 172nd SIB were informed in Spring 2003 of the unit's impending transition to SBCT status, with an effective date of 1 October, 2003. SIB members were given the option to extend their tour in Alaska and accept assignment to the SBCT for a 3-year period. Some SIB members extended and others did not. The latter were held over in the SBCT while awaiting reassignment elsewhere. To fill out the unit, personnel from outside of Alaska were brought in. Survey assessment measures were taken of each unit within the 172nd as it reached its 90% fill level. SIB holdovers awaiting reassignment were not surveyed. Survey administration was confined to 2 weeks in December, 2003 (Group A), and 2 weeks in March, 2004 (Group B) (See Table 2 for the unit composition of each). Interviews with key leaders and staff and focus group discussions with randomly selected platoon leaders and Soldiers from Group A were also conducted during the March data collection window.

Table 2
Unit Composition of Groups A and B

Om Composition of G	Houps II und B
Group A	Group B
172 nd Headquarters and Headquarters Company	4-11 Field Artillery Battalion
172 nd Brigade Support Battalion	562 nd Engineer Company
21st Signal Company	A/52 nd Anti-Tank Company
572 nd Military Intelligence Company	2-1 Infantry Battalion
4-14 Field Artillery Battalion	4-23 Infantry Battalion
1-17 Infantry Battalion	

Survey Instruments

Two survey instruments were developed. The Company/Battery/Troop and Platoon survey (Appendix A.) (hereafter referred to as the Company survey) was given to all personnel holding duty positions at company/battery/troop level and below. The Brigade/Battalion/Squadron survey (Appendix B) (hereafter referred to as the Brigade survey) was given to all personnel above company/battery/troop level. Survey participation was voluntary and responses were treated as confidential. Both surveys contained 23 demographic and classification questions (e.g., age, gender, education, rank, duty assignment, unit assignment) plus assessment scales in the following areas: leadership team cohesion (LTC), attitudes toward personnel stabilization, leader effectiveness, learning climate, job motivation, job satisfaction, morale, and well-being. LTC is defined as the combined impact of horizontal, vertical and organizational influences on leader cohesion. Learning climate was defined by Siebold (1999) as "the extent to which the leaders establish norms and values emphasizing Soldier training and development, as opposed to, for example, norms focusing on obedience or looking good." (p. 20)

Additionally, the Company survey contained a Soldier cohesion (SC) scale, where SC is defined as the combined impact of horizontal, vertical and organizational influences on Soldier cohesion. Whenever possible, the two surveys were constructed as parallel forms, containing identical questions on sections where this was appropriate and otherwise incorporating wording variations to reflect the reference group(s) to which the questions pertained (i.e., platoon-level Soldiers/leaders in the Company survey and brigade-, battalion/squadron-level leaders/staff in the Brigade survey). All items, except demographic and classification inquiries, were answered on a five point, Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree). On all cohesion-related questions, respondents acted as observers in rating the level of the referent object (e.g., teamwork, trust) in relation to their specific unit subgroup (e.g., platoon).

Survey administration was supervised by the assessment team's field coordinator, embedded within the 172nd SBCT at Fort Wainwright. The units' sergeant major or first sergeant were responsible for survey distribution and administration. Soldiers took 30-40 min to complete the survey. All members of all units of the 172nd SBCT were scheduled for survey administration during the 2-week data collection window in December and March, with the specific administration date and time within these windows determined by the units themselves. Except for individuals officially unavailable for duty on the dates selected for survey administration, virtually all (99%) unit personnel were surveyed. After sealing their completed surveys in envelopes distributed with the surveys, respondents printed the first letter of their last name and last four digits of their social security number on the front of the envelopes to enable the longitudinal tracking of cohesion levels and the associated impact of specific variables (e.g., leader effectiveness, unprogrammed and duty position turbulence) thought to influence these levels over time.

Cohesion measures. Both cohesion scales (LTC and SC) were adapted from earlier work by Siebold (1996; 1999) and Siebold and Kelly (1988a; 1988b), with minor item wording changes made to optimize fit with the current application. These scales include items designed to assess horizontal, vertical, and organizational dimensions of cohesion, plus the social and task components of each.

Because the Brigade survey was administered only to leaders and staff, SC questions were omitted, while the LTC scale was expanded somewhat to ensure appropriate focus on leadership dynamics. Thus, the Company survey assessed both LTC and SC, while the Brigade survey assessed only LTC. For brevity, only items from the Company survey are presented in the following tables. Brigade LTC survey items were either identical (when appropriate) or adapted to reflect the appropriate reference group (i.e., brigade or battalion/squadron leaders/staff).

Tables 3 and 4, respectively, present LTC and SC items from the Company survey. The LTC and SC scales were parallel and essentially identical, differing only in item lead-ins that established separate reference groups (platoon leaders for the LTC scale and platoon Soldiers for the SC scale), plus minor wording substitutions within the items to make them consistent with their respective reference group.

Table 3¹ Company Survey LTC Items

In my platoon(s), leaders ...

Horizontal-Social

- Trust each other. (29)
- Care about each other. (30)

Horizontal-Task

- Work well together to get the job done. (31)
- Work well as a team. (32)

Vertical-Social

- Trust their Soldiers. (34)
- Care about their Soldiers. (35)
- Can get help from their Leaders on personal problems. (36)

Vertical-Task

- Have the skills and abilities to lead Soldiers in combat. (33)
- Train well together with their leaders. (37)

Organizational-Social

- Support Army values of loyalty, duty, respect, selfless service, honor, integrity, and personal courage. (27)
- Set the example for these same Army values. (28)
- Feel they play an important part in accomplishing the unit's mission. (38)
- Feel proud to be members of the unit. (39)
- Know what is expected of them. (40)
- Know the behaviors that will get them in trouble or punished. (45)

Organizational-Task

- Are satisfied with the time available for family, friends, and personal needs. (41)
- Are satisfied with unit social events. (42)
- Feel they are serving their country. (43)
- Have opportunities to better themselves. (44)

Survey item numbers are in parentheses.

Other scales. The job motivation scale is from Siebold (1996). Job satisfaction, morale, and well-being scales were adapted from the U.S. Army Research Institute's Fall 2003 Sample Survey of Military Personnel (SSMP). Leader effectiveness and command climate scales were adapted from a combination of Siebold (1999) and the SSMP. The attitude toward stabilization scale was constructed specifically for this assessment effort. Representative items from these scales, listed in order of highest item-scale correlations (in parentheses), are presented in Table 5.

Table 4¹ Company Survey SC Items

In my platoon(s), Soldiers ...

Horizontal-Social

- Trust each other. (47)
- Care about each other. (48)

Horizontal-Task

- Work well together to get the job done. (51)
- Work well as a team. (52)

Vertical-Social

- Trust their leaders. (49)
- Care about their leaders. (50)
- Can get help from their leaders on personal problems. (53)

Vertical-Task

- Have the skills and abilities to lead Soldiers in combat. (33)
- Train well together with their leaders. (54)

Organizational-Social

- Support Army values of loyalty, duty, respect, selfless service, honor, integrity, and personal courage. (46)
- Feel they play an important part in accomplishing the unit's mission. (55)
- Feel proud to be members of the unit. (56)
- Know what is expected of them. (57)
- Know the behaviors that will get them in trouble or punished. (62)

Organizational-Task

- Are satisfied with the time available for family, friends, and personal needs. (58)
- Are satisfied with unit social events. (59)
- Feel they are serving their country. (60)
- Have opportunities to better themselves. (61)

¹Survey item numbers are in parentheses.

Table 5¹

Representative Items from Stabilization, Leader Effectiveness, Learning Climate, Job Motivation, Job Satisfaction, Morale, and Well-Being Scales

Attitude toward Force Stabilization (2 items)

- I think the goal of stabilizing Soldiers in the 172nd SBCT is a good idea. (.766) [24]
- I think the goal of stabilizing Leaders in the 172nd SBCT is a good idea. (.766) [25]

Leader Effectiveness (15 items)

Leaders in my platoon(s) ...

- Show they are the kind of leaders one would want to serve under in combat. (.867) [82]
- Work hard and try to do as good a job as possible. (.849) [79]
- Demonstrate they have the expertise to show their Soldiers how best to perform a task.
 (.846) [85]

Learning Climate (10 items)

In my platoon(s), Soldiers ...

- Feel leaders have confidence that their Soldiers will do their jobs right. (.819) [92]
- Are provided with guidance when assigned new duties. (.787) [93]
- Feel that the emphasis is on getting things right, and not just on looking good. (.785) [90]

Job Motivation (4 items)

- I am very personally involved in my work. (.829) [100]
- I look forward to starting work each day. (.816) [99]
- I don't mind taking on extra duties and responsibilities. (.738) [97]

Job Satisfaction (8 items)

I am satisfied with ...

- The quality of my training. (.774) [111]
- The number of personnel available to support my training. (.771) [112]
- My education/training opportunities. (.742) [110]

Morale (2 items)

- The morale level in my unit is good. (.915) [117]
- My morale level is good. (.915) [118]

Personal Well-Being (5 items)

- My mental health status is good. (.767) [120]
- I am satisfied with the Army as a way of life. (.739) [116]
- My unit works hard to provide equal opportunity for all. (.732) [121]

Spouse/Family Well-Being (9 items)

- The quality of Army child care programs is good. (.749) [129]
- The availability of Army child care programs is good. (.736) [128]
- The availability of family medical care is good. (.706) [130]

Additional comments. The last page of each survey form was reserved for written comments. Here, respondents were invited to comment on topics covered in the survey, or on any other topics of concern to the respondent or his/her family.

¹Survey item numbers are in brackets.

Interviews

In order to capture lessons learned from this initial UFS implementation, 1-hr interviews were scheduled with Group A brigade and battalion/squadron leaders/staff (commanders, executive officers, deputy commanders, command sergeants major, personnel officers, training officers, and chaplains) as well as company commanders and company first sergeants. Interviews were conducted approximately 3 months following survey administration. Fifty-nine interviews of the following ranks were conducted: sergeant first class (n = 1), first sergeant (14), command sergeant major (4), captain (21), major (13), lieutenant colonel (4), and colonel (1). Interviews were conducted by a team of four assessment team members. Each interview was conducted by two members of the team. One member asked questions, probed for follow-up information, and generally directed the interview while the second assessment team member took notes. All possible pair-wise combinations of four interviewers were employed with approximately equal frequency. Also, interviewers and note takers alternated role responsibilities so that across all interviews each member of the assessment team had an equal opportunity to interview and take notes. Interview session notes were transcribed the same day using laptop computers equipped with voice recognition software. See Table 6 for the specific interview questions used.

Table 6 Interview Questions

- The transition to a stabilized personnel system began as early as last summer. How have things been going in your unit since then?
- How has stabilization affected your unit, either positively or negatively?
- How has stabilization affected you personally?
- What kind of information/training have you received/provided on stabilization?
- How do you think stabilization affects cohesion in your unit?
- Are there barriers in your unit to fully implementing Unit focused stability? What can be done about them?
- What changes could be made to make stabilization more effective?
- Based on what you've experienced so far, what lessons learned would you tell the next unit about starting up as a stabilized unit?
- What haven't I asked you that I should have?

Focus Groups

Nine focus group sessions were held in order to ensure that lessons learned were collected from all components of the 172nd SBCT. Five groups contained junior enlisted Soldiers (E1-E4) and two groups each contained squad leaders (E5-E6) and platoon leaders (O1-O2). Group size was limited to six participants, drawn randomly from available personnel. Participation was voluntary. Group sessions were conducted by pairs of assessment team members, with one member of each pair serving as moderator and the other as session recorder. The moderator asked questions, probed for follow-up information, and generally directed the session while the second assessment team member took notes. As with the interview sessions, moderators and note takers alternated role responsibilities across sessions. Notes were transcribed the same day by the session recorder. The focus group questions are shown in Table 7.

Table 7 Focus Group Questions

- Are any of you making a permanent change in station this Spring or Summer? Next Summer (2005)? How about 2006?
- What unit/location were you in before coming to the 172nd SBCT?
- Did you volunteer or were you assigned? If volunteer, why?
- How has stabilization affected your platoon?
- How has stabilization affected you personally?
- [Not used with junior enlisted groups] How do you think stabilization will affect your unit training plan?
- If your next assignment is also to a stabilized unit, what will you tell them about your experiences here?
- [Time permitting] What kind of explanation or training did you get about stabilization before you came to the unit? Since you came to the unit? Was it enough?
- What do you think is the best way to capture lessons learned from the 172nd?
- If you were the company commander, what things would you do to make stabilization a success?
- Is there anything else I haven't asked you that you'd like to discuss?

Treatment of Data

Survey data were machine scored, entered into a Statistical Package for the Social Sciences for Windows (SPSS, 2004) database, and examined for quality prior to the start of analysis. Fifty-one records had no response variability from the first 5-point scaled item (Q24) to the end of the survey, suggesting that these respondents may have given less than full attention to completing the form. Another 35 respondents were not clear on their unit membership and/or did not give personal identifiers, making it impossible to match their responses with those to be obtained in future survey administrations. Altogether, 86 records (3.0%) were removed from the database, leaving a total of 2,662 records in the Company survey file and 111 records in the Brigade survey file.

Alpha levels. Because the Company survey group was so much larger than the Brigade survey group, a more stringent alpha of .01 was set for the former, whereas alpha was set at .05 for the latter. This more stringent alpha level for the Company survey data applied only to initial overall analyses. Follow-up tests (i.e., multiple comparisons following a significant univariate F, and series of univariate Fs following a significant multivariate F) were conducted at alpha = .05. The SPSS Least Significant Difference (LSD) procedure was used for pair-wise multiple comparisons following each significant overall F test involving more than two means.

Effect size. Overall results were considered significant only when they met a dual criterion: (a) statistical significance permitting rejection of the null hypothesis at .01 (Company survey) or .05 (Brigade survey), and (b) a minimum effect size of .02. This dual criterion was used because large sample sizes (such as seen with the Company survey) can produce statistically significant results with little if any associated practical significance. Effect size (typically reported as eta squared) is a ratio of treatment variance to total variance and is not directly affected by sample size to the extent that occurs with the F ratio. Eta squared can be thought of as roughly equivalent to R^2 in multiple regression, or an index of the percentage of variance in any given

analysis accounted for by the independent variable(s). In social and behavioral research, eta squared values of .01, .06, and .14 are considered small, medium, and large, respectively (Green, Salkind, & Akey, 1997; Sprinthall, 2003). The minimum required .02 effect size selected for this assessment exceeds a small effect and is approximately a third of the way toward a more desirable medium effect level. When combined with a required .01 alpha for the Company survey and .05 alpha for the Brigade survey, the dual criterion serves to eliminate from discussion results that are statistically significant but practically trivial.

Interview and focus group data analysis. Interview and focus group transcriptions were analyzed for content by session recorders. This resulted in a list of issues covered in each interview and focus group session. The issues on the list were then tallied across all interviews of a given recorder and combined for all recorders to produce a master list of session issues.

Results

Total Brigade membership at the time of the surveys equaled 3,321. Of these Soldiers, 2,964 were present for duty (PDY) during scheduled data collection windows. Soldiers not PDY required an excused absence, which consisted of one of the following: temporary duty (such as school) that could not be interrupted or rescheduled, hospital confinement or other approved medical excuse, absent without leave (AWOL), punitive incarceration, anticipated permanent change of station (PCS)/estimated time of separation (ETS) prior to the next scheduled survey window, on leave, on pass, or emergency (car accident, for example). Of the 2,964 eligible PDY Soldiers, 2,933 (98.6%) completed surveys and 2,898 (98.8%) of these were validated against company rosters and forwarded for scoring. Prior to analyzing the data, 125 records (4.3% of validated surveys) were removed from the database due to quality assurance concerns, principally lack of response variability to the scaled survey items. The final number of analyzed surveys (2,773) captured data from 93.6% of all eligible PDY Soldiers in the 172nd SBCT, including 2,662 Company survey respondents as well as 111 leaders and staff who took the Brigade survey. Demographic and classification data are presented in Table 8.

Company survey respondent demographics. Company survey respondents had been in the 172^{nd} SBCT an average of 2.88 months (SD=1.66) at the time they were surveyed. Reported duty positions included company commander, first sergeant, or executive officer (3.3%), platoon leader, platoon sergeant, or section leader (15.8%), squad or team leader (19.5%), and section member or squad/team member (61.4%). Over a third of respondents (37.9%) reported that they were members of the previous 172^{nd} SIB from which the 172^{nd} SBCT was formed. The demographic profile was predominantly male, with female respondents concentrated largely in headquarters, brigade support, signal, and military intelligence units. The age demographic showed that 80.7% of respondents were younger than 30. Eighty-five percent lived on post and 35.6% reported that they had volunteered for SBCT assignment.

Brigade survey respondent demographics. Duty positions reported on the Brigade survey included brigade leader (3.7%), brigade staff officer (13.9%), brigade staff noncommissioned officer (NCO) (7.4%), battalion/squadron leader (13.9%), battalion/squadron staff officer (33.3%), and battalion/squadron staff NCO (27.8%). As shown in Table 8, Brigade survey respondents were older, married, more highly educated, and of higher rank than Company survey

respondents. Moreover, they were more likely to be a member of the 172^{nd} SIB, a volunteer, and to live off post. On average, they had served in the 172^{nd} SBCT 3.74 months (SD = 1.77) at the time they were surveyed. Gender and race profiles for the two survey groups were similar.

Table 8
Company and Brigade Survey Respondent Demographics

Company and Brigade Survey Respo	Company	Brigade
Variable	Survey	Survey
Number of Completed Surveys	2,662	111
Number of completed surveys	%	%
Sex	 	
Male	96.4	94.6
Female	3.6	5.4
Rank]	5.4
Enlisted (E1-E4)	66.5	0.9
NCO (E5-E8)	26.2	42.7
Officer (O1-O6)	7.4	57.3
Age	/	37.3
Under 20	18.1	0.0
20-29	62.6	21.8
30-39	17.8	53.6
40+	1.4	24.5
Race (Percentages sum to > 100	1.4	<i>⊾</i> ⊣. <i>3</i>
because of multiple responses.)		
Hispanic	13.6	8.3
American Indian or Alaskan Native	4.3	2.8
Asian Asian	3.4	0.9
Black or African American	14.0	16.5
Pacific Islander	1.8	0.9
White	76.4	77.5
Education	, , , ,	, , , ,
High School or Less	59.0	2.7
Some College	30.6	33.3
Bachelor's Degree	8.5	32.4
Graduate Training	2.0	31.5
Marital Status		51.5
Single	50.9	13.5
Married	44.6	80.2
Divorced or Separated	4.5	6.3
Member of Previous 172d SIB		
Yes	37.9	59.5
No	62.1	40.5
Assignment Status		
Volunteer	35.6	53.2
Assigned	64.4	46.8
Residence		_
On Post	85.1	60.4
Off Post	14.9	39.6

Key Items

Although both surveys contained several multi-item scales (see Tables 3 and 4), an examination also was made of individual items, regardless of scale. It was thought that examination of items with extreme means (both high and low) might advance understanding of the 172nd mindset as it began the stabilization process. Table 9 lists the 12 highest rated items on the Company survey.

Table 9^{1,2}
The 12 Most Highly Rated Items from the Company Survey

		The 12 Most Highly Rated items from the Company Survey
M	SD	
		Work Ethic
4.44	.645	I work hard and try to do as good a job as possible. (98)
4.12	.843	 Leaders in my platoon work hard and try to do as good a job as possible. (79)
4.08	.853	 Leaders in my platoon(s) maintain high standards for unit performance. (81)
4.24	.772	Teamwork • Leaders in my platoon(s) encourage Soldiers to work together as a team. (74)
4.16	.860	Caring Leaders • Leaders in my platoon(s) look out for the welfare of their Soldiers. (72)
4.18	849	Army Values In my platoon(s), Leaders set the example for these same Army values. (28)
		Rule Clarity
4.29	.757	• In my platoon(s), leaders know the behaviors that will get them in trouble or punished. (45)
4.24	.801	 In my platoon(s), Soldiers know the behaviors that will get them in trouble or punished.(62)
		Supportive Environment
4.35	.813	• Sexual harassment is not tolerated in my unit. (122)
4.08	.929	My mental health status is good. (120) On the form their Leaders on personal.
4.08	.922	 In my platoon(s), Soldiers can get help from their Leaders on personal problems. (53)
4.07	.919	 In my platoon(s), Leaders can get help from their Leaders on personal problems. (36)
		10 0 500 + 0 642

The number of valid responses ranged from 2,592 to 2,643.

Items in Table 9 were ones endorsed most strongly by respondents. The items have been arranged in the table to show how they cluster into six categories. The listed items came from

²Survey item numbers are in parentheses.

five different scales: leader effectiveness (4 items), LTC (3 items), SC (2 items), personal well-being (2 items), and job motivation (1 item). In general, responses indicate that respondents believe that they have a strong work ethic, work in a supportive environment, with clear rules, caring leaders, established values, and a focus on teamwork.

Table 10 lists the 12 most highly rated items from the Brigade survey. Responses to these items reflect a similar clustering structure to that found in the Company survey, except that brigade, battalion, and squadron leaders placed even higher emphasis on Army values.

Table 10^{1,2}
The 12 Most Highly Rated Items from the Brigade Survey

		The 12 Most Highly Rated Items from the Brigade Survey
M	SD	·
		Strong Work Ethic
4.58	.514	 I work hard and try to do as good a job as possible. (132)
4.41	.610	 I am very personally involved in my work. (134)
4.42 4.39 4.39 4.35 4.33	.613 .718 .663	Army Values The following support the Army values of loyalty, respect, selfless service, honor, integrity, and personal courage: • Battalion/Squadron staff members. (30) • Battalion/Squadron Leaders. (CDR,CSM, XO) (29) • Brigade leaders support Army values. (CDR, DCO, CSM, XO) (27) The following set the example for these values: • Brigade Leaders. (32) • Battalion/Squadron Leaders. (34)
4.32	.676	Battalion/Squadron Staff Members. (35)
4.35	.669	Rule Clarity Other Leaders/Staff Members in my brigade or battalion/squadron are well aware of the behaviors that will get them into trouble. (103)
4.33	.755	Patriotism Other Leaders/Staff Members in my brigade or battalion/squadron feel they are serving their country. (106) Supportive Environment
1 15	710	Sexual harassment is not tolerated in my unit. (157)
4.45	.710 .606	My mental health status is good. (155)
4.37	טטט.	3 (/

¹The number of valid responses ranged from 109 to 111.

Survey items that received lowest mean ratings, are displayed in Tables 11 and 12 for the Company and Brigade surveys, respectively. Housing and other family-related well-being issues

²Survey item numbers are in parentheses.

were of principal concern to all respondents. Brigade survey respondents also expressed concerns about the unit's current combat readiness, given the unit's newly formed status. Relatively low mean scores on interpersonal conflict items suggest that 172nd SBCT leaders have developed few, if any, serious interpersonal conflicts.

Table 11^{1,2}
The 12 Company Survey Items with Lowest Mean Ratings

The 12 Company Survey Items with Lowest Mean Ratings		
M	SD	
		Housing
3.03	.983	• The quality of non-government housing is good. (127)
3.04	1.019	• The availability of non-government housing is good. (126)
3.09	1.209	• The quality of government housing is good. (125)
3.18	1.201	• The availability of government housing is good. (124)
3.08 3.21	1.023	Child Care • The availability of Army child care programs is good. (128) • The quality of Army child care programs is good. (129)
		Family Support
		• In my platoon(s), are satisfied with the time available for
3.33	1.203	family, friends, and personal needs. (58)
224	005	• The availability of work for my spouse is good. (123)
3.34	.995	
		Training and Preparedness
3.16	1.254	 In my platoon(s), Soldiers are currently prepared to accomplish
3.10	1.23	their wartime mission. (95)
3.25	1.119	 In my platoon(s), Soldiers are confident in the quality of their equipment. (96)
		Interpersonal Conflicts
2.52	1.242	 I am having a personality conflict with one of my Leaders. (106)
2.62	1.240	 I am having a personality conflict with one of my fellow
		Soldiers. (105)

The number of valid responses ranged from 1,747 to 2,639. Some items had reduced ns because they were asked only of qualifying respondents, such as married respondents or those with children in the home.

²Survey item numbers are in parentheses.

Table 12^{1,2}
The 12 Brigade Survey Items with Lowest Mean Ratings

M	SD	
		Housing
2.80	1.143	• The availability of non-government housing is good. (161)
2.85	1.138	• The quality of non-government housing is good. (162)
3.00	1.286	• The availability of government housing is good. (159)
2.87 3.20 3.42 3.50	.973 .971 1.075	 Child Care The availability of Army child care programs is good. (163) The quality of Army child care programs is good. (164) Family Support/Personal Life Other Leaders/Staff Members in my brigade or battalion/squadron are satisfied with the time available for family, friends, and personal needs. (104) The quality of family medical care is good. (166)
		Training and Preparedness
3.18	1.208	 Staff members in my brigade or battalion/squadron are currently prepared to accomplish their wartime mission. (129)
3.28	1.072	 Staff members in my brigade or battalion/squadron are confident in the quality of their equipment. (130)
3.41	1.163	 I am satisfied with the number of personnel available to get work done. (148)
		Interpersonal Conflicts
2.41	1.107	 I am having a personality conflict with one or more of my Staff Members. (141)
2.49	1.159	 I am having a personality conflict with one or more of my Leaders. (140)

 $^{^{1}}N = 111$ on all items.

Effects of Demographic and Classification Variables on Key Survey Items

In this section, the 12 most highly rated items (for Company and Brigade survey respondents considered separately) were examined to determine if they were related to demographic and classification variables. In each of the following multivariate analyses of variance (MANOVAs), demographic and classification variables served as independent variables and the 12 items with highest means were entered as multiple dependent measures. Results indicated that responses to key survey items were significantly related to several demographic and classification variables.

Company survey. A significant multivariate F(24, 4844) = 4.27, eta squared = .021 was obtained for rank. On all 12 items, officers registered the highest mean responses and junior enlisted Soldiers registered the lowest, with NCO responses falling somewhere in between. Ten

²Survey item numbers are in parentheses.

of 12 follow-up univariate F tests were significant. Table 13 shows illustrative mean differences by rank, F(2, 2435) = 15.28. A multiple comparison test showed that the responses from officers and NCOs did not differ from one another, but both significantly exceeded the mean responses of junior enlisted personnel.

Table 13
Rank Differences in Perceived Availability of Help with Personal Problems

Item	Rank	M	SD	n
In my platoon (s),	Junior Enlisted	4.02	.989	1,610
Soldiers can get help	NCO	4.19	.725	647
with personal	Officer	4.34	.654	178
problems	Total	4.09	.910	2,435

Gender also accounted for significant variance in key Company survey items, producing a multivariate F(12, 2461) = 5.34, eta squared = .025. On 11 of 12 items (as shown by follow-up univariate F tests), the mean response for Company survey male respondents significantly exceeded the corresponding mean responses for female respondents. Data in Table 14 illustrate the pattern, univariate F(1, 2472) = 37.98.

Table 14
Gender Differences in Perceived Leader Concern with Soldier Welfare

ved Leader C	OHOUTH		4101 110
Gender	M	SD	n
Male	4.19	.840	2,387
Female	3.62	1.03	87
Total	4.17	.853	2,474
	Gender Male Female	Gender M Male 4.19 Female 3.62	Male 4.19 .840 Female 3.62 1.03

Respondents who had been members of the 172^{nd} SIB prior to formation of the 172^{nd} SBCT scored significantly lower on the 12 key survey items than respondents who had not, multivariate F(12, 2464) = 7.49, eta squared = .035. As revealed by its eta squared estimate of effect size, this variable was even more powerful than rank or gender. Follow-up univariate F tests revealed significant effects for 10 of 12 key items. Data from an illustrative item are presented in Table 15, univariate F(1, 2475) = 59.72.

Table 15
Effect of SIB Membership on Perceived Leader Concern with Soldier Welfare

CICCIVOU DOUG	of Contects	7 112022 20 -	
172 nd SIB	M	SD	n
Yes	4.00	.933	941
No	4.27	.782	1,536
Total	4.17	.853	2,477
	172 nd SIB Yes No	172 nd SIB <i>M</i> Yes 4.00 No 4.27	Yes 4.00 .933 No 4.27 .782

Respondents who said that they had volunteered for 172^{nd} SBCT assignment scored significantly higher on the 12 key survey items than respondents who were assigned to the unit, multivariate F(12, 2458) = 4.60, eta squared = .022. Follow-up univariate F tests produced significant effects on 5 of 12 key items. Data from an illustrative item are presented in Table 16, univariate F(1, 2469) = 22.77.

Table 16
Effect of Volunteering on Mental Health Status

Item	Status	M	SD	n
My mental health status is	Volunteered	4.20	.830	890
good.	Assigned	4.02	.965	1,581
	Total	4.08	.923	2,471

Brigade survey. Brigade survey data were examined to determine if demographic or classification variables related significantly to the 12 highest rated items identified in Table 10. As with the analytic procedure used with Company survey data, demographic and classification variables served individually as independent variables and in each analysis the 12 survey items were entered as dependent measures. No significant multivariate effects were found, although trends consistent with those seen in the Company survey analyses were observed for rank, gender, and (most prominently) previous SIB membership, F(12, 98) = 1.62, p = .099, eta squared = .165.

Unit assignment. Unit assignment deserves special note. This classification variable accounted for substantial variance in both surveys, but failed to reach the double criterion of both multivariate statistical significance and eta squared of at least .02. Substantial differences among units occurred on every key item in the Company survey, but patterns varied from item to item. This produced strong univariate differences on individual items and even a significant multivariate effect, F(120, 24540) = 3.77, but an effect size less than the .02 criterion (eta squared = .018). For the Brigade survey, a substantial effect size (eta squared = .138) was accompanied by a nonsignificant multivariate F(72, 588) = 1.30.

Scale Reliabilities

Cohesion scales. Table 17 presents Cronbach's alpha and split-half reliability coefficients for Company survey cohesion scales. Coefficients for both LTC and SC scales were robust. With 19 items each, both scales produced Cronbach's alphas of > .95 and split-half coefficients of at least .82.

Table 17
Cronbach's Alpha and Split-Half Reliability Coefficients for Company Survey
LTC and SC Total and Subscale Scores

Scale	N	# Items	Alpha	Split-Half
LTC Total Scale	2,468	19	.956	.820
Horizontal	2,566	4	.919	.764
Vertical	2,571	5	.902	.772
Organizational	2,519	10	.901	.742
Social	2,523	11	.937	.826
Task	2,529	8	.889	.648
SC Total Scale	2,505	19	.951	.832
Horizontal	2,594	4	.904	.703
Vertical	2,576	5	.903	.789
Organizational	2,551	10	.904	.782
Social	2,545	11	.929	.809
Task	2,553	8	.878	.651

Table 18 presents corresponding LTC data for the Brigade survey. (It will be recalled that the Brigade survey contained no SC scale.) Coefficients in this table are also robust.

Table 18
Cronbach's Alpha and Split-Half Reliability Coefficients for Brigade Survey LTC Total and Subscale Scores

Scale	N	# Items	Alpha	Split-Half
LTC Total Scale	111	81	.990	.930
Horizontal	111	12	.938	.830
Vertical	111	51	.987	.914
Organizational	111	18	.948	.788
Social	111	56	.987	.89 1
Task	111	25	.964	.822

Other scales. Table 19 provides reliability data for the other scales used in the assessment. All reliability coefficients were satisfactorily robust on the Company survey. For the Brigade survey, the family well-being split-half reliability coefficient was unsatisfactory (r = .35). A closer examination of the data, however, revealed that this value was partly an artifact of the way SPSS splits scales for its reliability calculations (front half-back half). When an odd-even split was substituted, a satisfactory coefficient of r(110) = .752 resulted.

Table 19
Cronbach's Alpha and Split-Half Reliability Coefficients for Stabilization, Leader Effectiveness, Learning Climate, Job Motivation, Job Satisfaction, Morale, and Well-Being Scales on the Company and Brigade Surveys

Survey and Scale	n	# Items	Alpha	Split-Half
Company Survey	2,662			
Stabilization	2,615	2	.867	.766
Leader Effectiveness	2,561	15	.960	.883
Learning Climate	2,584	10	.904	.768
Job Motivation	2,637	4	.759	.568
Job Satisfaction	2,596	8	.865	.713
Morale	2,623	2	.805	.674
Personal Well-Being	2,577	5	.752	.543
Family Well-Being	1,598	9	.861	.652
Brigade Survey	111			
Stabilization	109	2	.780	.641
Leader Effectiveness	111	18	.954	.827
Learning Climate	109	18	.882	.608
Job Motivation	111	4	.726	.588
Job Satisfaction	108	8	.869	.678
Morale	111	2	.772	.630
Personal Well-Being	111	5	.804	.614
Family Well-Being	110	9	.753	.350

Cohesion Levels in the 172nd SBCT

SBCT cohesion levels are summarized in Table 20. When these data are rounded to the nearest tenth, LTC cohesion responses among Company survey respondents averaged 4.0. Subscale means (horizontal, vertical, organizational, social, and task) ranged from 3.9 to 4.0. Company survey SC cohesion averaged 3.9 and subscale means ranged from 3.8 to 3.9. Brigade survey LTC levels averaged 4.0 and subscale means ranged from 4.0 to 4.2. (Note: Subscale means add back to total scale means only when they are weighted for number of subscale items.)

Table 20 Cohesion Measures for the 172nd SBCT

Conesion Measures for the 172 SBC1						
Survey and Scale	M	SD	· N			
Company Survey LTC	3.95	.695	2,468			
Horizontal	3.94	.842	2,566			
Vertical	3.96	.802	2,571			
Organizational	3.93	.674	2,519			
Social	4.00	.714	2,523			
Task	3.86	.721	2,529			
Company Survey SC	3.86	.692	2,505			
Horizontal	3.86	.787	2,594			
Vertical	3.93	.801	2,576			
Organizational	3.81	.718	2,551			
SC Social	3.89	.715	2,545			
Task	3.81	.712	2,553			
Brigade LTC	4.04	.595	111			
Horizontal	4.01	.643	111			
Vertical	3.99	.633	111			
Organizational	4.18	.554	111			
Social	4.06	.610	111			
Task	3.99	.599	111			

Company survey LTC cohesion. Differences among horizontal, vertical, and organizational LTC cohesion means (see Table 20) were tested with a repeated-measures ANOVA, where cohesion component served as the repeated measure. The three means were statistically uniform. A second repeated-measures ANOVA, however, indicated that the social subscale mean significantly exceeded the task subscale mean, F(1, 2467) = 390.37, eta squared = .137.

Company survey SC cohesion. Horizontal, vertical, and organizational dimensions of SC differed significantly, F(2, 5008) = 57.08, eta squared = .022 (see Table 20 for relevant means). The only significant pair-wise comparison was that vertical cohesion significantly exceeded organizational cohesion, F(1, 2532) = 166.26, eta squared = .062. Moreover, the social subscale mean exceeded the task mean, F(1, 2504) = 139.66, eta squared = .053.

Brigade survey LTC cohesion. Among Brigade survey respondents, horizontal, vertical, and organizational cohesion differed significantly, F(2, 220) = 23.28, eta squared = .175. Organizational cohesion was greater than either horizontal, F(1, 110) = 23.67, eta squared = .177 or vertical, F(1, 110) = 35.41, eta squared = .243, and there were no other significant pair-wise differences. As can be seen in Table 20, horizontal and vertical cohesion means were virtually

identical. Moreover, the social subscale mean response was higher than that obtained for the task subscale, F(1, 110) = 8.39, eta squared = .071

Thus, social cohesion exceeded task cohesion in all three possible comparisons (Company survey LTC, Company survey SC, and Brigade survey LTC), though it should be pointed out that absolute mean differences were small, the largest being 0.14 on a 5-point scale. Differences among horizontal, vertical, and organizational dimensions of cohesion depended on scale and survey. Among Company survey respondents, no differences emerged on the LTC scale, and vertical cohesion was the dominant dimension on the SC cohesion scale. Among Brigade survey respondents, in contrast, organizational cohesion was dominant. In any event, absolute mean differences were hardly impressive, the largest being 0.17 on a 5-point scale.

Factors That Influence Unit Cohesion

Demographic and classification variables were examined to see which, if any, related to LTC and SC cohesion measures. Variables with a significant relation to overall cohesion (either LTC or SC) were examined in detail to see if cohesion subcomponents (horizontal, vertical, organizational, social, task) were differentially related. As in the analyses reported above, both statistical significance and a minimum eta square = .02 were required.

Company survey LTC. Table 21 summarizes the relations among demographic and classification variables and obtained Company survey LTC cohesion responses. All variables listed in the table exhibited a significant relation with Company survey LTC cohesion but only the first two (SIB membership and unit assignment) were both statistically significant and produced the required minimum eta squared of .02.

Respondents who had served in the 172^{nd} SIB were significantly lower on cohesion, F(1, 2460) = 72.39, eta squared = .029, than respondents who had not. Follow-up 2 x 3 (SIB/NonSIB x Horizontal/Vertical/Organizational LTC) and 2 x 2 (SIB/NonSIB x Social/Task LTC) ANOVAS, with repeated-measures on the second factor, produced no significant interaction effects in either analysis, indicating that all five LTC subcomponents were uniformly affected by previous SIB membership. In other words, SIB membership uniformly depressed all dimensions of LTC cohesion among Company survey respondents.

Unit assignment (within the 172^{nd} SBCT) was associated with significant variation in LTC cohesion levels, F(10, 2442) = 26.33, eta squared = .097. Data are presented in Table 22 without identifying units. In particular, it can be seen that Unit C has low cohesion. This unit's mean cohesion level (3.09), while still above the scale's midpoint, is nonetheless more than a full scale point less than the 172^{nd} SBCT's most cohesive unit (Unit I, M = 4.26). Multiple comparison tests produced numerous significant pair-wise comparisons, but Unit C was understandably the source of many of these differences. Not only did Unit C register the lowest LTC cohesion in the SBCT, it was significantly lower than all 10 of the other units. A follow-up repeated-measures ANOVA using only Unit C data revealed that LTC subscales differed significantly, F(2, 80) = 5.90, eta squared = .129. Organizational LTC (M = 3.22; SD = 0.86) was relatively robust in this unit, and significantly exceeded both vertical (M = 2.90; SD = 1.09), t(42) = 3.76 and horizontal LTC cohesion (M = 3.01, t(40) = 2.03. Though all these means are

depressed relative to SBCT-wide levels, it appears that Unit C respondents are relatively attached to the larger organization but may be having difficulty with unit leaders. Social versus task LTC subscales, however, did not differ in Unit C.

Table 21
The Effect of Demographic and Classification Variables
On Company Survey LTC

On Company Survey LTC						
Survey and Scale	M	SD	n			
Company Survey LTC	3.95	.695	2,421			
SIB Yes	3.80	.720	934			
SIB No	4.04	.664	1,528			
Unit A	3.90	.711	85			
Unit B	3.65	.766	353			
Unit C	3.09	.915	41			
Unit D	3.99	.659	267			
Unit E	3.93	.735	350			
Unit F	3.82	.593	212			
Unit G	3.96	.606	77			
Unit H	4.04	.633	38			
Unit I	4.26	.573	481			
Unit J	3.68	.645	54			
Unit K	3.99	.616	495			
Junior Enlisted (E1–E4)	3.94	.734	1,604			
NCO (E5-E8)	3.93	.626	639			
Officer (O1-O3)	4.10	.542	178			
4	2.25	605	0 071			
Male	3.96	.685	2,371			
Female	3.47	.800	88			
On Boot	3.96	.697	2,087			
On Post	3.86	.661	360			
Off Post	3.00	100.	300			
Company Leader	4.19	.523	81			
Platoon Leader	3.99	.619	375			
Squad/Team Leader	3.87	.666	468			
Squad/Team Member	3.95	.722	1,464			
	·					

Company survey SC. Company survey SC results, summarized in Table 22, generally were consistent with Company survey LTC results. Variables listed in the table exhibited a significant relation with Company survey SC but only the first two variables (SIB membership and unit assignment) were both statistically significant and produced the required minimum eta squared.

Respondents who had served in the 172^{nd} SIB were significantly lower on cohesion, F(1, 2496) = 64.00, eta squared = .025 than those who had not. Moreover, follow-up 2 x 3 (SIB/NonSIB x Horizontal/Vertical/Organizational SC) and 2 x 2 (SIB/NonSIB x Social/Task SC) ANOVAS, with repeated-measures on the second factor, produced no significant interaction

effect in either analysis, indicating that SIB membership had a similarly depressive effect on all five SC subscales.

Unit assignment (within the 172^{nd} SBCT) was associated with significant variation in SC levels, F(10, 2477) = 19.62, eta squared = .097. Data in Table 22 closely parallel the results in Table 21 for the LTC cohesion scale. Unit C was again noticeably lower than other units, with a mean (3.10) more than a full scale point lower than the SBCT's most cohesive unit (Unit I, M = 4.12). Multiple comparison tests confirmed that Unit C once again had lower cohesion than that in any other unit. Repeated-measures ANOVAS using only Unit C data revealed that SC subscales differed significantly, F(2, 84) = 15.61, eta squared = .271. Horizontal SC cohesion (M = 3.63; SD = 0.86) was relatively robust, and significantly exceeded both vertical SC cohesion (M = 2.83; SD = 1.11), F(1, 44) = 19.90 as well as organizational SC cohesion (M = 3.00, F(1, 43) = 20.59, while the latter two (vertical and organizational) did not differ. Thus, on the SC index, Unit C respondents seemed to be having little trouble bonding with fellow Soldiers, but relatively more problems in adjusting to leaders and the larger organizational context. As with the LTC scale, social versus task SC cohesion subscales did not differ.

Table 22
The Effect of Demographic and Classification Variables
On Company Survey SC

On Company Survey SC					
Survey and Scale	M	SD	n		
Company Survey	3.86	.692	2,505		
SIB Yes	3.72	.699	957		
SIB No	3.94	.676	1,541		
Unit A	3.85	.685	86		
Unit B	3.60	.738	364		
Unit C	3.10	.773	43		
Unit D	3.91	.649	269		
Unit E	3.85	.765	355		
Unit F	3.74	.602	214		
Unit G	3.81	.647	80		
Unit H	3.89	.643	39		
Unit I	4.12	.610	486		
Unit J	3.67	.600	55		
Unit K	3.89	.636	497		
Junior Enlisted (E1–E4)	3.83	.738	1,619		
NCO (E5-E8)	3.85	.611	657		
Officer (O1-O3)	4.06	.507	179		
·					
Male	3.87	.688	2,408		
Female	3.48	.710	87		
Company Leader	4.13	.476	84		
Platoon Leader	3.95	.606	386		
Squad/Team Leader	3.85	.728	480		
Squad/Team Member	3.86	.691	1,474		

Brigade survey respondent LTC. The only demographic or classification variable to affect Brigade survey respondents' LTC was gender (see Table 23). Male Brigade survey respondents reported higher cohesion than their female counterparts, F(1, 109) = 4.97, eta squared = .044. The mean gender difference was 0.55, and follow-up analyses revealed that this magnitude occurred uniformly across all five LTC subscales (horizontal, vertical, organizational, social and task). Although mean gender differences of comparable magnitude also occurred among Company survey respondents, the reader should note that Brigade survey results were based on only 6 female respondents.

Table 23
The Effect of Demographic and Classification Variables
On Brigade Survey Respondent LTC

Survey and Scale	M	SD	n
Brigade Survey LTC	4.05	.595	111
Male	4.07	.588	105
Female	3.52	.508	6

Unit Climate Variables

Summary measures for unit climate variables are listed in Table 24, in order of descending means. Variables are listed separately for the two surveys. Among Company survey respondents, unit climate variables clustered into groups with high, medium, and low scores. On the high end, respondents were motivated, respectful of their leaders, and possessed of a high degree of personal well-being. Mean ratings on the top three climate variables almost reached 4.0. At a somewhat lower level (but still above the scale midpoint of 3.0) is a cluster of climate variables with means around 3.6, consisting of learning climate, stabilization, job satisfaction, and morale. Morale and job satisfaction means of 3.55 and 3.57, respectively, while satisfactorily robust, leave room for improvement as well. Support for the notion of personnel stability is positive also, but at this early stage respondents are not unrealistically wild about it either. The 3.59 mean may reflect a cautionary "wait and see" attitude. Learning climate is positive, but with room for improvement here also. At the bottom of the Company survey unit climate variable list, however, is family well-being, which stands not only distinctly apart from all other climate items in the table, but particularly so with respect to its counterpart, personal well-being, the climate variable with the highest mean of all. The personal well-being scale contains items such as, "My physical health status is good," and "My mental health status is good." Family well-being items, in contrast, are asked principally of married respondents and/or of respondents with children under their direct care. They assess such dimensions as: "The availability of work for my spouse is good," "The quality of government housing is good," The quality of Army childcare programs is good," and "The quality of family medical care is good."

Table 24
Summary Measures for Unit Climate Variables

Sullilliary Micasures for	CILL CIMI		
Survey and Scale	M	SD	N
Company Survey			
Personal Well-Being	3.98	.685	2,577
Leader Effectiveness	3.97	.745	2,561
Job Motivation	3.94	.700	2,637
Learning Climate	3.67	725	2,584
Stabilization	3.59	.987	2,609
Job Satisfaction	3.57	.802	2,596
Morale	3.55	1.02	2,623
Family Well-Being	3.22	.708	1,598
Brigade Survey			
Personal Well-Being	4.29	.584	111
Job Motivation	4.23	.586	111
Leader Effectiveness	4.08	.628	111
Morale	3.97	.762	111
Stabilization	3.91	1.04	109
Job Satisfaction	3.68	.787	108
Learning Climate	3.66	.559	109
Family Well-Being	3.17	.634	110
		<u> </u>	

Among Brigade survey respondents, personal well-being, leader effectiveness, and job motivation also appeared atop the list of highest rated unit climate variables, just as they did among Company survey respondents. Brigade survey respondents appear to be working hard in a leader-empowered environment where personal well-being is a given. All three of these unit climate variables received a mean rating in excess of 4.0. Morale among Brigade survey respondents is robust as well, almost 4.0, and job satisfaction and support for the personnel stability initiative is not far behind. Note that although job satisfaction among leaders (3.86) is higher in an absolute sense than among Company survey respondents (3.57), both measures are nonetheless well above the scale midpoint of 3.0. Also of note is that job satisfaction among both groups falls short of job motivation. Moreover, the discrepancy is identical (0.37) among Brigade and Company survey respondents. Both groups are by and large satisfied with the current realities of their jobs, but motivated to do a better job and thus possibly become even more satisfied. Learning climate was relatively lower (next to last) in the Brigade survey hierarchy of climate variables. It was fourth among eight variables in the Company survey. An explanation for this discrepancy is not apparent.

Perhaps the most troubling aspect of Table 24, however, is that family well-being falls at the bottom of the unit climate variable list for both Brigade and Company survey respondents. Moreover, this climate variable received almost identical means on both surveys (they both round to 3.2). Thus, the respondents of both surveys seem to be equally dissatisfied with this aspect of Army life.

The family well-being scale contains 9 items. Means from both the Company and Brigade surveys are listed in Table 25. Here, a high degree of correspondence between survey

respondent ratings can be seen. Items concerned with the availability and quality of medical care and the availability of spousal employment received relatively high ratings, both among Brigade and Company survey respondents. Officers' spouses seemed to have a slightly easier time at finding employment, but otherwise these top-tier ratings were similar in pattern and magnitude. In the middle of the pack were items concerning quality of Army childcare programs and availability of government housing. Means were virtually identical for Brigade and Company survey respondents alike. At the bottom of the table, however, are the items that caused greatest concern for survey respondents, including at the very bottom of the list, availability and quality of non-government housing. On the four items with lowest ratings, Brigade survey means are lower than Company survey means. Adequate housing and childcare were major concerns among all respondents.

Table 25
Individual Items in the Family Well-Being Unit Climate Scale (Valid *n*s Ranged from 1,775 to 2,078 [Company Survey] and 110 to 111 [Brigade Survey])

20 2,0,0 Company San to				
	Company		Company Brigade	
Item	Su	rvey	Survey	
	M	SD	M	SD
The availability of family medical care is good.	3.60	.990	3.63	1.01
The quality of family medical care is good.	3.55	.994	3.55	1.03
The availability of work for my spouse is good.			3.50	1.02
The quality of Army child care programs is good.	3.21	.928	3.20	.971
The availability of government housing is good.	3.18	1.20	3.19	1.21
The quality of government housing is good.	3.09 1.21 3		3.00	1.29
The availability of Army child care programs is good.		1.02	2.87	.973
The availability of non-government housing is good.	3.04	1.02	2.85	1.14
The quality of non-government housing is good.	3.03	.983	2.80	1.14

Cohesion and Unit Climate Means Compared with Results from Previous Research

Formal comparisons of current results with previous outcomes cannot be defended, strictly speaking. Too many variables are left uncontrolled. Even when the same or similar measurement scales are employed in two investigations, the wording or verb tenses of individual items may be tailored to fit Soldiers in a particular rotation or research setting (Siebold, 1996, p. 242). With that caveat expressed, nonetheless, the results above invite comparisons, especially with Siebold (1996), who used similar (though not always identical) 5-point measurement scales. Siebold measured LTC cohesion with a four item scale. The LTC scale in the current assessment employed 19 items, but four of the items were the same ones used by Siebold (1996) with only minor wording changes to optimize their situational appropriateness. (Siebold [1996] did not measure SC cohesion.)

Siebold (1996) reported an initial (predeployment) LTC cohesion mean of 3.79 with a SD of 1.03. LTC cohesion means from the current assessment were 3.95 (SD = .695) and 4.04 (SD = .595), for Company and Brigade surveys, respectively. Identical scores could not have been expected, given differences in measurement procedure. Nonetheless, results are similar enough

to raise concerns. All three means were taken soon after a unit's formation, and yet are robust. With initial means this high, there is little room for the longitudinal pattern that might be logically expected to occur based on our best understanding of the cohesion development process, that is, a progressive increase in cohesion levels as Soldiers spend more and more time together in the same unit, presumably building and strengthening bonds that form the basis for strong unit cohesion.

Siebold's (1996) predeployment mean of 3.79 was the first of a series of measurements taken across the life cycle of a peacekeeping mission in the Sinai. From the initially robust mean of 3.79, he observed a pattern of progressive deterioration in LTC cohesion scores. On the last measurement occasion near the end of the 6-month deployment, the mean had dropped to 2.86 (SD = 1.07). Past results do not guarantee future performance, of course, but initial levels of cohesion approaching 4.0 on a 5-point scale leave more room for deterioration than potential for increase on subsequent measurement occasions. Only time will tell.

Siebold (1996) also reported patterns of progressive decline in unit climate variables as well. Table 26 presents Siebold's initial (predeployment) data and compares it with data from the current assessment. The caveat discussed above with respect to cohesion data holds for these measures as well. Though all measures were collected on 5-point scales and the scales were similar in the two investigations, they cannot be represented as strictly identical due to minor wording changes. Nonetheless, interesting similarities and differences emerge. Job motivation and learning climate scores were roughly comparable for the two investigations. Moreover, means were elevated in both investigations. Leader effectiveness scores were higher in the 172nd SBCT, but were nonetheless well above the scale mid point among Siebold's (1996) peacekeeping Soldiers.

Table 26
Company and Brigade Results Compared with Siebold (1996) Results

ly did Bligade results some			
Source	M	SD	N
Siebold (1996)			
Job Motivation	4.19	0.70	325
Learning Climate	3.78	0.89	324
Leader Effectiveness	3.56	1.13	313
Company Survey			
Job Motivation	3.94	0.70	2637
Learning Climate	3.67	0.73	2584
Leader Effectiveness	3.97	0.75	2561
Brigade Survey			
Job Motivation	4.23	0.59	111
Learning Climate	3.66	0.56	109
Leader Effectiveness	4.08	0.63	111

Siebold's (1996) job motivation scores deteriorated from the predeployment tabled mean of 4.19 to 3.54 by the end of the mission. Learning climate scores declined from 3.78 to 3.07, and leader effectiveness scores from 3.56 to 3.32. No one can say presently if similar declines will occur in the 172nd SBCT across its operational cycle. Both cohesion and unit climate variable scores may remain level, increase, or fluctuate nonlinearly. Nonetheless, the most commonly

reported longitudinal pattern (at least for cohesion scores, where longitudinal patterns have been reported) consists of progressive deterioration across a unit's normal life cycle (Henderson, 1990; Siebold, 1996; Vaitkus, 1994). For this reason, future cohesion and unit climate variable scores will be monitored closely.

Predicting Cohesion From Unit Climate and Demographic/Classification Variables

Correlations among unit climate variables, relevant demographic and classification variables, and the three overall indexes of unit cohesion are listed in Table 27. Leader effectiveness emerged as the variable most highly correlated with cohesion.

Table 27¹
Correlations Among Unit Climate Variables,
Demographic/Classification Variables, and Cohesion

Demographic/Classification variables, and Conesion.						
Unit Climate or						
Demographic/Classification	Company	Company	Brigade Survey			
Variable	Survey LTC	Survey SC	LTC			
Unit Climate Variables						
Personal Well-Being	.629	.629	.683			
Leader Effectiveness	.848	.814	.855			
Job Motivation	.558	.564	.675			
Learning Climate	.753	.799	.714			
Stabilization	.381	.363	.454			
Job Satisfaction	.674	.693	.649			
Morale	.625	.640	.713			
Family Well-Being	.357	.366	.398			
Demographic/Classification						
Variables						
Rank	ns	.068	ns			
Gender	130	102	209			
Unit Assignment	.187	.157	ns			
SIB Membership	.169	.158	ns			
On or Off Post	054	ns	ns			

¹All tabled coefficients are statistically significant. Alpha = .01 for all unit climate variable values. For demographic/classification variables, alpha = .01 for the Company survey and .05 for the Brigade survey. Gender was coded "1" for male and "2" for female. Thus, negative correlations indicate lower levels of cohesion among female respondents. SIB was coded "1" for previous member and "2" for not previous member. Thus, positive correlations indicate that nonmembers had higher cohesion scores. On-Post residence was coded "1" and off-post residence was coded "2." Thus, a negative correlation indicates higher cohesion among on-post respondents.

Company survey LTC prediction model. Multiple regression with step-wise variable entry was used to determine the best combination of variables to predict LTC. The multiple regression procedure, however, is sensitive to missing data on a test-wide basis. If a respondent has missing data on any variable in the procedure, all of that particular respondent's data are eliminated from the entire analysis. The reader may recall that family well-being measures were not collected earlier from about 1,000 Company survey respondents when they had no direct knowledge of the relevant issues (spousal employment, childcare, non-government housing, etc.). Thus, when the list of prediction variables included the family well-being scale, the respondents who had no answers on this scale could not be included in the analysis. Accordingly, a multiple regression analysis was run including the family well-being predictor, followed by a second analysis without this predictor, but with a much larger base of respondents. The two prediction models were highly similar and the family well-being predictor variable was not selected for inclusion in the model even when it was made available. In the following, therefore, only the second model, which omitted the family well-being unit climate variable, but included data from all eligible respondents (n = 2,123), is reported.

Based on Company survey data, with LTC cohesion specified as the criterion variable, seven predictors entered the equation before the iterative stepwise process terminated. Variables are listed in Table 28 in the order they entered the prediction model. All listed variables significantly enhanced the prediction model, but the tabled data indicate that leader effectiveness was the dominant predictor, entering the equation first and accounting for 94.5% (.724/.766 = 94.5%) of all variance in the model, notwithstanding the eventual presence of six other predictors.

Table 28 Company Survey LTC Prediction Model (n = 2,123)

Predictor Variable	R	R^2	R ² Change	F Change
Leader Effectiveness	.851	.724	.724	5564.22
Morale	.864	.746	.022	185.55
Learning Climate	.871	.759	.013	111.98
Stabilization	.873	.762	.004	32.94
Job Satisfaction	.874	.764	.002	16.81
Job Motivation	.875	.765	.001	8.50
SIB Membership	.875	.766	.001	8.04

Company survey SC prediction model. This eight-predictor model, summarized in Table 29, was similar to the one above for Company survey LTC cohesion. The two models shared 7 of 8 predictor variables. The eighth predictor variable, occurring in the SC but not the LTC model, was personal well-being. Leader effectiveness, however, was the dominant predictor in both models, although in the SC model it combined with learning climate to produce a parsimonious two-predictor model that accounted for 97.2% (.734/.755 = 97.2%) of the variance.

Table 29 Company Survey SC Prediction Model (n = 2,151)

	7 5	D 2	n2 C1	E 01.
Predictor Variable	R	R^2	R ² Change	F Change
Leader Effectiveness	.816	.667	.667	4296.99
Learning Climate	.857	.734	.067	542.20
Morale	.865	.748	.014	121.74
Personal Well-Being	.866	.751	.002	21.35
Job Satisfaction	.867	.752	.002	13.86
Force Stabilization	.868	.753	.001	9.14
Job Motivation	.868	.753	.001	7.05
SIB Membership	.869	.755	.001	5.46

Brigade survey LTC prediction model. Only two variables entered the Brigade survey prediction model, leader effectiveness and job motivation (see Table 30). These two predictors, however, produced a model with a multiple $R^2 = .740$, accounting for about the same proportion of variance as in the two-predictor Company survey models.

Table 30
A Multiple Regression Brigade LTC Prediction
Model (n = 104)

Predictor Variable	R	R^2	R ² Change	F Change
Leader Effectiveness	.850	.720	.723	266.22
Job Motivation	.863	.740	.022	8.68

Survey Comments

Company survey. The last page of each survey form invited respondents to enter written comments on issues that concerned them or their families. These comments were coded and tallied, yielding a total of 596 comments from 417 respondents (15.7% of 2,662 Company survey respondents). Results are summarized in Table 31, where the first % column indicates the percentage of responses and the second column shows the percentage of total respondents who wrote a comment on the listed issue. Thus, 93 of 417 respondents who wrote comments directed them to the issue of housing and these 93 respondents constituted 3.5% of the total sample. Issues mentioned by at least 10 survey respondents are listed. Numbers in parentheses indicate the number of different respondents commenting on each issue. Housing was the top concern, especially overcrowded barracks and difficult to obtain family housing. Training concerns, the second most frequently mentioned issue, reflected a number of related problems, including missing equipment (i.e., weapons, vehicles, cold weather gear) that prevented the scheduling of some training events. About 1 respondent in 50 (n = 55, or 2.1%) wrote about a theme that centered around what they considered to be a lack of care/respect/trust, most often (n = 42)attributed to officers not respecting their Soldiers. The fourth most frequently cited concern was career development, particularly how it might be negatively impacted by stability. Difficulties accomplishing the SBCT transition rounded out the top five concerns.

Table 31
Issues of Concern to Company Survey Respondents

issues of Concern to Company Survey Respon	% of	% of Total
Issue	Responses	Respondents
13340	(n = 417)	(n = 2,662)
Housing (93)	22.3	3.5
Barracks overcrowded, cold, dilapidated (70)		
Family housing unavailable/slow processing (20)		
 Bldg 1040 needs washers and dryers (2) 		
• Asbestos concerns in family housing (1)	14.6	2.3
Training (61)		
• Lack thereof (25)		
• Poor (7)	<u> </u>	
• Medics not busy (5)		
• Too early in unit stand up (need to in process first) (4)		
Would like to attend specialty school (3)		
• Too much running (3)		
• Need more field training (3)		
 Monotonous (2) 		
 Not enough on combat operations (2) 		
 Not enough for NCOs (2) 		
 Do not have the right tools (1) 		
 AFPT standards too high (1) 		
 Inadequate scheduling (1) 		
 Training areas inadequate (1) 		
 Troops inexperienced (1) 	10.0	0.1
Lack of Care/Respect/Trust/Army Values (55)	13.2	2.1
• Leader to Soldier (42)		
• Soldier to leader (8)		
• Leader to leader (3)		
 No recognition for accomplishments (2) 		
Professional Development (50)	12.0	1.9
 Hindered by stabilization (28) 	12.0	1.9
• Stay in position too long (4)		
 Counseling poor (2) 		
• Captains not sure of future (1)		
 Lack of promotion qualifying positions (4) 		
 Lack of promotion incentives (4) 		
 No outside education opportunities (3) 		
• E6 doing E5 job (1)		
• Too many Captains (1)		
• Time in grade rather than productivity used for promotion (1)		
Stabilization not applied equally to officers (1)		
Unit Having Difficulty Transforming to SBCT (34)		
Post not prepared for influx (14)	8.2	1.3
Leaders confused/decisions questionable (11)		
• Lengthy in-processing (3)		
• Poor in-processing (3)		
- 1 ou in processing (5)	1	

Under funded (2)		
Personnel services staff unavailable (1)		
Low Morale (33)		
Concern with NCOs (32)	7.9	1.2
Generally poor (19)	7.7	1.2
• Micromanage (6)		
Not open to suggestion (3)		
Don't delegate effectively (2)		
Missing when needed (2)		
Lack of Equipment (25)		0.0
Family/Leisure Activities (20)	6.0	0.9
More after work activities needed (8)	4.8	0.8
Separation concerns (3)		
• Lack of military concern for (3)		
Spousal employment difficult (2)		
Not enough leave (2)		
Not enough time for family (1)		
Need bus for elementary school (1)		
Childcare (16)		
• Expensive (6)		
• Unavailable (6)	3.8	0.6
• Poor facilities (2)		
• Too long to establish (2)		
Pay (14)		
• Too little (8)		
• COLA too low (6)	3.4	0.5
Dissatisfaction with Alaska (12)		
MOS Mismatch (12)		
Medical Care (11)	2.9	0.5
• Dental too costly (4)	2.9	0.5
• Inadequate (3)	2.6	0.4
• Too busy (2)		
• Too restrictive (TRICARE) (1)		
• Rude medical staff (1)		
Work Hours Too Long (11)		
Officers (10)	2.6	0.4
• Generally poor (3)	2.4	0.4
 Disrespectful of NCOs (3) 		
• Micromanage (3)		
 Poor communicators (1) 	1	1

Brigade survey. Nineteen of 111 Brigade survey participants submitted a total of 26 written comments, for a response rate of 17.1%. Only four issues received comment from as many as three officers: housing (5 comments), professional development (4), lack of Army values (3) and difficulty transitioning to SBCT (3). All four of these concerns also appeared among the top five concerns registered by Company survey respondents (see Table 31).

Lessons Learned: Interview and Focus Group Results

Table 32 contains a list of concerns that emerged from interviews and focus groups. Unquestionably, the paramount concern (especially among junior officers and NCOs) was that personnel stabilization would negatively impact career progression. This concern surfaced in virtually every interview, and the topic often worked its way into focus group discussions multiple times during the same session. The limited number of command positions within a brigade-sized unit was a prime concern. Captains, in particular, were concerned that they would not have the opportunity to command (a Branch qualification requirement for promotion) or at best might have to accept a shortened command assignment due to the number of precommand captains waiting in cue and the relatively short time available for eligible captains to exercise command. A related concern, expressed by NCOs, was that turbulence of company commanders moving rapidly into and out of command slots in a stabilized unit would negatively impact cohesion.

Table 32
Interview and Focus Group Concerns

- Negative impact on career progression
- Poorly organized implementation
- Inconsistent, incomplete, and confusing information
- Conviction of positive impact on cohesion and training
- Missing equipment
- Anticipated positive impact on families
- Infrastructure inadequacy
- Leader turbulence

The uncoordinated manner in which stabilization was implemented came under intense criticism. Personnel flow was often poorly coordinated. Troops arrived in some instances before their leaders, and supply sergeants arrived months after the rest of their unit. Many Soldiers questioned the adequacy and accuracy of available information. Interviewees reported having to make career-impacting decisions on short notice based on information that in retrospect turned out to be incomplete or erroneous (e.g., that school attendance would be allowed during the stabilization period). Members of the former 172nd SIB, who based decisions on incomplete or erroneous information, were particularly dissatisfied with some aspects of the SIB-to-SBCT transformation. Part of their original attraction to the 172nd SIB had been its Alaska location and its reputation as a "hunting and fishing brigade" that had not been deployed since Viet Nam. Now they found themselves in a high operational tempo (OPTEMPO) unit likely to be deployed.

There were numerous suggestions, moreover, that stabilization ground rules were not applied uniformly across all ranks. A recurrent complaint along these lines was that majors were allowed to leave the SBCT but captains were not.

Perceived infrastructure inadequacy to accommodate the rapid standup of a brigade-sized unit, particularly a shortage of barracks space for incoming Soldiers, was a major complaint. Barracks that had been condemned the previous year and slated for demolition reportedly were returned to active service, resulting in substandard living conditions for many Soldiers. Inadequate heating, plugged latrines, and pervasive overcrowding were frequent complaints.

Lack of equipment and slow in-processing were other frequently voiced concerns. Insufficient field gear and uniform items (e.g., cold weather gear, helmets, and canteens) were not available to many Soldiers, and in the infantry battalions, individual weapons were in short supply.

In spite of these problems, it was widely believed that stabilization would have a positive impact on unit cohesion because of the enhanced opportunity to undergo digital New Equipment Training (NET) in a personnel-stabilized environment. Positive impact on married survey respondents' families was expected as well, because of predictability of assignment, fewer relocation moves, continuity of dependent schooling, and increased opportunities for spousal education. Single Soldiers, in contrast, expressed mixed views regarding the potential benefits of stabilization. While some of them may welcome the opportunity for prolonged assignment, especially if they find their assignment location satisfactory, others may have joined the Army expressly to see the world. For these latter Soldiers, stabilization may well interfere with one of their principal goals.

Discussion

This assessment report is the first in a planned series designed to identify (a) the impact of personnel stability and associated variables on unit cohesion as the 172nd SBCT transitions from IRS to UFS and (b) pros and cons associated with implementation of UFS within the 172nd SBCT. To these ends, data were collected via on-site surveys of all available unit personnel, individual interviews of key unit leaders and staff, and focus group discussions with platoon- and squad-level leaders and Soldiers.

Cohesion in the 172nd SBCT

Notwithstanding a myriad of problems associated with unit transition from SIB to SBCT status under the new UFS manning system and the pervasive concern that personnel stabilization would negatively impact officer and NCO career development, cohesion within the 172nd STCT was robust. Cohesion was perceived to be slightly higher among Brigade survey respondents than among Company survey respondents, and slightly higher among officers than among NCOs and junior enlisted, but the differences were minor in most cases. Some statistically reliable differences among cohesion subscales emerged. Among Brigade survey respondents, for example, organizational cohesion was higher than horizontal or vertical cohesion. This may reflect brigade and battalion leader and staff ability to understand and appreciate their unit's role in the larger context of Army organization. At the company/battery/troop and platoon levels, vertical cohesion was higher than organizational cohesion as measured on the SC scale. This may mean that Soldiers had developed more confidence in their immediate leaders than in the larger organization in which they were embedded, not a surprising finding early in a unit's life cycle. The most consistent subscale finding was that social cohesion always exceeded task cohesion. This may mean that Soldiers focus initially on getting acquainted, and then subsequently learn tactics needed to achieve common goals.

The finding from previous COHORT evaluations that horizontal cohesion often exceeds vertical cohesion (Furukawa, et al., 1987) did not occur in this assessment. On measures of both SC and LTC cohesion, horizontal and vertical subscale scores were virtually identical. This parity occurred, moreover, on both Company and Brigade surveys. Furukawa, et al. (1987) conjectured that NCO and officer turbulence in COHORT units interfered with the development of vertical cohesion. Under the 172nd SBCT's current UFS policy, stabilization is applied equally to junior enlisted, NCOs, and officers alike in order to facilitate the development and maintenance of all dimensions of cohesion. Judging from the horizontal-vertical parity observed in the current assessment, the desired effect may have been achieved.

Factors influencing cohesion. Cohesion levels differed significantly across gender groups, with male survey respondents consistently reporting higher mean levels of cohesion than those reported by their female counterparts. Differences were reported for both LTC and SC on the Company survey, as well as for LTC on the Brigade survey, although the latter survey was based on only 6 female soldiers. Moreover, the mean gender discrepancy on the Brigade survey was just as large as that reported on the Company survey. It was not clear why this difference occurred, but it was so large and so consistent that it merits continued study. The gender gap, moreover, was not confined to cohesion but was manifest as well on a variety of other indexes.

Cohesion was lower among former SIB troops, perhaps reflecting some of the dissatisfaction evident among interview and focus group participants concerning the perceived inaccurate and incomplete information given to SIB members about the forthcoming stabilization initiative. SIB Soldiers also scored significantly lower on key survey items. Clearly, the outlook of SIB Soldiers had been negatively affected by the uncoordinated manner in which stabilization was implemented in the 172nd SBCT. For some former SIB Soldiers, the transformation to SBCT had been accompanied by unwelcome OPTEMPO increases. Interview results revealed that for Soldiers whose decisions to stay in the unit had been based on incomplete or inaccurate information, some of these increases were particularly unwelcome.

Unit membership within the SBCT accounted for significant variance in cohesion measures. One unit in particular consistently registered lower cohesion than other units. A closer examination of the unit's data, moreover, revealed that some aspects of cohesion were lower than others. On the SC scale, horizontal cohesion was relatively robust and significantly exceeded both vertical and organizational cohesion, while the latter two did not differ. This outcome suggested that the unit's Soldiers were successfully bonding with fellow Soldiers, but were adjusting less satisfactorily to unit leaders and the larger organizational context. Interviews with this unit's key leaders confirmed these impressions. Not only were the leaders aware of the problems and how they had developed, but they had already taken steps to ensure their resolution. In this case, a survey-based measure of unit cohesion had served as a successful diagnostic instrument, providing insight into complex and otherwise inscrutable unit dynamics. Given the overall excellent reliabilities of the cohesion scales used in this assessment, further use of the scales in this capacity merits consideration.

Longitudinal patterns of cohesion development. The current report provides only a baseline from which subsequent deviations can be examined, but there is no denying that initial cohesion levels within the 172nd SBCT are robust. With levels averaging at or near 4.0 on a 5-point scale,

there is more room for a downside than an upside movement. On the other hand, initially high cohesion is not necessarily a bad thing, and progressive deterioration from current levels is by no means inevitable. Several other longitudinal patterns have been reported in the literature, including U-shaped and inverted U-shaped outcomes (e.g., Bartone & Adler, 1999). About the only two patterns that have not been reported is a steady state outcome where no change occurs, and the pattern that might be logically expected where cohesion starts low and steadily builds over time as Soldiers have more opportunity to work together. The multitude of outcome patterns that have been observed, and the incomplete understanding of why any particular pattern develops, underscores the critical importance of measuring cohesion over time. With the demonstrated reliabilities of the cohesion scales employed in this assessment, it is likely that subsequent changes in level will be detected, if indeed they occur.

Predicting cohesion. It is unlikely that cohesion develops in a vacuum. Siebold (1999) hypothesized that learning climate interacts with cohesion, so that the best performance of all occurs in cohesive units with strong learning climates. Bartone and Adler (1999), moreover, reported that different unit climate variables influenced cohesion at different times during a military unit's operational cycle. During early deployment, confidence and trust in leaders was of paramount importance. The emphasis shifted to confidence in fellow Soldiers and mission success at mid-deployment, and in late phases of deployment the strongest predictors of unit cohesion shifted back to confidence in leaders as well as trust that families were being cared for on the home front.

In the current assessment, both LTC cohesion and SC cohesion were highly related to unit climate variables, especially leadership effectiveness. This result is consistent with Bartone and Adler's (1999) early-deployment finding. Although leadership effectiveness in the current assessment and Bartone and Adler's confidence and trust in leaders were operationalized differently, they appear to tap a similar dimension, the belief that leaders are good, competent people who look out for their Soldiers and their Soldiers' families. Relations between cohesion and unit climate variables will be monitored in subsequent assessments to determine if cohesion is affected by different variables as the unit progresses through its 3-year operational cycle.

Lessons Learned

The pros. A complex picture emerged from this initial assessment. On the one hand, survey results indicated that respondents were hard-working, motivated, career-focused, cohesive, and proud of their leaders and unit affiliations. Respondents reported that they, and their unit leaders and Soldiers, worked hard in a supportive environment where rules were clear, teamwork was encouraged, Army values were upheld, and leaders cared about them. Self-reported mental health status was high, sexual harassment was not tolerated, and help was available to leaders and Soldiers alike when personal problems arose. Most survey respondents were at least moderately supportive of UFS. A common sentiment was that, although it was still too early to see many of its effects, in the long run stabilization would positively impact unit cohesion and training effectiveness, as well as improve family well-being.

The cons. Balanced off against these positive perceptions was an undercurrent of concern about the potentially negative impact of personnel stabilization on career development,

especially the careers of junior officers and NCOs. Inconsistent and incomplete information about UFS implementation was criticized repeatedly. Interviewees and focus group participants insisted that they had not been provided accurate, timely, and complete information. They emphasized that they had needed this information early on but that even several months later it still had not been provided. Considerable confusion existed around this issue. Most interviewees were aware that an Human Resources Command Implementation Plan existed, but they were unsure as to when it had become available.

Other problems had to do more with the transition from SIB to SBCT than with implementation of personnel stabilization under UFS. Compelling evidence surfaced that the Fort Wainwright infrastructure was initially overwhelmed by the massive influx of personnel required by the SBCT startup. Barracks space was limited and much of what was available was described as substandard. Latrines and showers did not work or were in short supply if they did work. Crowding was the norm and heating systems were in need of repair. It was much the same story for family housing. Both government and non-government family housing was described as unavailable, unaffordable, unfit for habitation, or some combination thereof. Dissatisfaction with housing was mentioned in the surveys, interviews, and focus groups.

Both leaders and Soldiers consistently gave high ratings to their own personal well-being, but this was hardly the case when it came to evaluating family well-being. It was not just family housing, either. The availability and affordability of day care, time available to spend with families, and opportunities for spousal employment all received relatively low ratings.

Missing equipment, especially Stryker vehicles, weapons, and cold weather gear, hampered training schedules during the early startup winter months when a full complement of proper gear was a prerequisite given the harsh climate. Individual weapons were in short supply in infantry battalions and this had hampered qualification firing. In- and out-processing lagged at times, and hundreds of former SIB members, who had not opted for an SBCT assignment, had not yet been transferred out of the unit. These problems had the effect of curtailing some training and, not surprisingly, resulted in low ratings on some training and preparedness survey questions. It is not possible, for instance, for Soldiers to have confidence in the quality of their equipment if it has not yet arrived. Nor can Soldiers or leaders feel prepared to accomplish their wartime mission when they have not had the opportunity to train for it. Such concerns, however, may inevitably accompany any startup, and in this instance were compounded by climate and supply issues.

UFS Implementation Recommendations

Based on lessons learned from interviews and focus groups, the following recommendations can be advanced:

- Proactively formulate a complete set of "ground rules" by which personnel stabilization will be implemented under UFS.
- Disseminate implementation ground rules to every potentially affected Soldier before they are required to make career-impacting decisions.

- When revisions are necessary, announce them well in advance and explain why they are being made.
- Keep changes to a minimum. Frequent ad hoc ground rule changes can give the appearance of capriciousness.
- Find ways to ensure that stabilization does not unduly penalize Soldiers' promotion opportunities.
- Enforce rules uniformly. Avoid the appearance of higher ranks receiving favorable treatment, a perception that can negatively affect morale.
- Make sure the host infrastructure is adequate to accommodate sudden troop influxes, such as occur with establishment of a new unit, and that equipment, NCOs, officers, training plans, and standard operating procedures (SOPs) are in place when troops arrive.
- Anticipate the need to accommodate and support Soldiers' families. Earlier COHORT studies, summarized by Furukawa et al. (1987), established that "Units that took adequate time to settle their families on arrival ... adjusted better than units that immediately began field-training activities." (p. 8)

Future Directions

Survey, interview, and focus group data collection will continue over the next year with attention paid to refinement and extension of pro and con lessons learned, determination of the effects of personnel stabilization (and related variables) on small unit cohesion, assessment of variable interrelations, and development of cohesion prediction models at different stages of the unit's operational cycle. Comparison of first and second year data will yield insight into longitudinal patterns of cohesion development in personnel stabilized units.

Two other activities will receive close attention during the coming year: Identification of small unit membership and development of small unit personnel turbulence measures. Since the seminal work of Shils and Janowitz (1948) the small unit has been identified as the appropriate level for assessment of the bonding processes that result in cohesive military groups. Although data are most often collected at the individual Soldier level, the conceptual arena in which cohesion is thought to develop is the platoon or squad. Thus, individual-level data often are aggregated to the level of the platoon or squad for analysis. This emphasis on the small unit was reaffirmed by researchers at the U.S. Army Research Institute (ARI): "During interviews, Soldiers reported that the squad and platoon levels are the most appropriate at which to measure cohesion." (Siebold, 1999, p. 17). Accordingly, Siebold and Kelly's (1988a; 1988b) cohesion scales, which were adapted for use in the current assessment, were targeted at platoon-level. To facilitate platoon-level analyses, a platoon (or section) coding system will be developed to permit the assignment of every Soldier to a specific platoon.

Personnel turbulence (both internal and external) will be tracked within each identified platoon or section. Although the entire brigade is personnel stabilized, some degree of external turbulence (e.g., unprogrammed losses/gains) is anticipated regardless of stabilization attempts, and some degree of internal turbulence (e.g., duty position changes) will continue as well. This turbulence will vary across platoons; some will be more affected than others. By carefully monitoring various kinds of turbulence within each platoon, it will be possible to determine if these measures covary with platoon cohesion measures.

The combination of survey, interview, focus group, and personnel turbulence data will provide a comprehensive picture of cohesion-development dynamics within the 172nd SBCT as it continues into the second of its anticipated 3-year operational cycle. By collecting data at the individual level and aggregating them at the platoon level for selected analyses, the resulting database will support a wide variety of hypothesis-testing explorations.

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APPENDIX A

SURVEY OF 172nd STRYKER BRIGADE COMBAT TEAM PERSONNEL: COMPANY/BATTERY/TROOP AND PLATOON

SURVEY OF 172nd STRYKER BRIGADE COMBAT TEAM PERSONNEL: COMPANY/BATTERY/TROOP AND PLATOON

PURPOSE: This survey is designed to obtain personal and work-related information from 172nd Stryker Brigade Combat Team (SBCT) Leaders at the company/battery/troop level and from both Leaders and Soldiers at the platoon level and below.

USES: Collected information will be used to evaluate potential benefits resulting from personnel stabilization under unit manning.

PRIVACY: Responses will be treated as strictly confidential. Only persons involved in collecting or preparing the responses for analysis will have access to completed surveys. Only group statistics will be reported.

PARTICIPATION: Survey participation is voluntary. You will not be penalized for failure to respond to any question. Your participation is encouraged, however, so that the data will be complete and representative of all participants.

AUTHORITY: Public Law 93-573, called the Privacy Act of 1974, requires that you be informed of the purpose and uses to be made of the information collected. The Department of the Army may collect the information requested in this survey under the authority of Title 10 United States Code, Section 2358.

MARKING INSTRUCTIONS

GENERAL INSTRUCTIONS

- Use either a No. 2 pencil or blue/black ink ballpoint pen.
- Make solid marks that fill the circle for your answer.
- Cleanly erase any marks you want to change.
 Make no stray marks of any kind on the form.

Correct: ● Incorrect: ේග්යය

MARKING NUMBERS OR LETTERS

If you are asked to give numbers or letters for your answer by filling in a circle, record the numbers or letters in the boxes along side the grid, and then fill in the circles of the grid as shown below.

Example:

How many months have you been in this duty position?

(If your answer is 16 months, for example, you would write "16" in the boxes as shown and then darken the corresponding circles.)

1000000 6000000000

Prepared by:

U.S. Army Research Institute for the Behavioral and Social Sciences Reserve Component Training Research Unit 1910 University Drive Boise, ID 83706-0002

> Telephone: (208) 334-9390 E-Mail: rctru@ari.army.mil

> > June 2004 Group A Time 3

6.	Are you Hispanic, Latin	o, or Spanish origin or	
	ancestry (of any race)?	MARK ALL THAT APPLY	۲.

O No. not of Hispanic, Latino, or Spanish ancestry

O Yes, Mexican, Mexican American, Chicano

O Yes, Puerto Rican

O Yes, Cuban

O Yes, other Hispanic/Spanish

7. What is your race? MARK ALL THAT APPLY.

 American Indian or Alasken Native (e.g., Eskimo, Aleut)

O Asian (e.g., Asian Indian, Chinese, Filipino, Japanese Korean, Vietnamese)

O Black or African American

O Native Hawaiian or other Pacific Islander (e.g., Samoan Guamanian, Chamorro)

O White

10. As defined above, how many dependent children do you

O None - Skip to Question 12

over half of their support.

One

O Two

O Three or more

11. How many of your dependent children are now living with you?

O None

O One

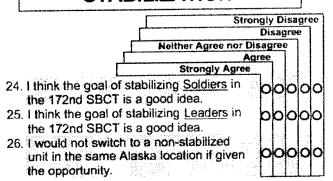
O Two

O Three or more

	1510411092		I
12.	The 172nd Separate Infantry Brigade officially converted to the 172nd SBCT in October 2003. How many months have you been a member of the 172nd SBCT?	19.	How did you become an 172nd SBCT member? O Volunteered O Assigned
		20.	Do you live on or off post?
	H888800000		On Post - Skip to Question 22
42	To what 172nd SBCT unit are you assigned?		O Off Post
	O 172nd Headquarters and Headquarters Company	21.	I live off post because
	O 172nd Prigade Support Battalion		O on-post housing was unavailable.
			O on-post housing was available but inadequate
	O 21st Signal Company		O life on-post is unappealing
	O 4-14th Cavalry Squadron		O life on-post is unsafe or unhealthy
	O 1-17th Infantry Battalion		O other
	O 4-11th Field Artillery Battalion	22.	I plan to leave the Active Component Army at:
	O 562nd Engineer Company		O the completion of my current obligation/ETS (Expiration of Term of Service)
,	O 1/52nd Anti-Tank Company		O my earliest retirement eligibility date
	O 4-23rd Infantry Battalion		(currently 20 years AFMS)
	O 572nd Military Intelligence Company		O after my earliest retirement eligibility date but before my mandatory retirement date
	O 2-1st Infantry Battalion		O my mandatory retirement date
			O the RCP (Retention Control Point) for my
14.	How many full months have you been a member of		current rank/pay grade
	this unit?	23.	How many total years of service will you have
			completed when you leave the Active Component Army?
15.	What is your current duty position? O Company/Battery/Troop Commander		O 0-4 years O 5-8 years
	O Company/Battery/Troop 1SG		
	O Company/Battery/Troop XO		O 9-12 years
	O Platoon Leader		O 13-16 years
	O Platoon Sergeant		O 17-20 years
	O Section Leader		O 20+ years
	O Section Member		
	O Squad/Team Leader		
	O Squad/Team Member		
16.	How many full months have you been in this duty position?		
17.	. Have you changed duty positions in the last 6 months?		
	O Yes		
	O No		
18.	. Were you a member of the 172nd Separate Infantry Brigade before joining the 172nd SRCT?		

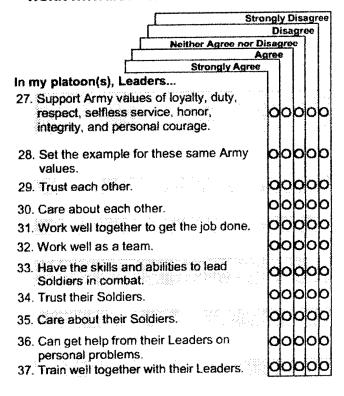
O Yes O No

STABILIZATION



IN MY UNIT

- IF YOU ARE A COMMANDER, 1SG, OR XO AT COMPANY/BATTERY/TROOP LEVEL, THEN ANSWER THE FOLLOWING QUESTIONS WITH RESPECT TO ALL OF YOUR PLATOONS.
- IF YOUR DUTY POSITION IS AT <u>PLATOON</u>
 <u>LEVEL OR BELOW</u>, THEN ANSWER THE
 FOLLOWING QUESTIONS WITH RESPECT
 TO YOUR PLATOON OR THE PLATOON YOU
 WORK WITH MOST CLOSELY

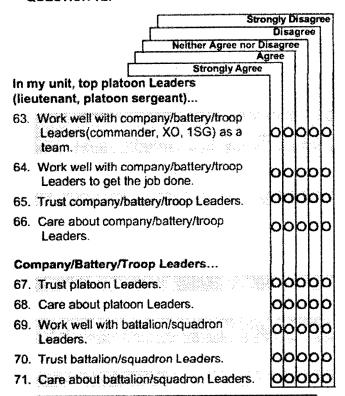


	trongly Disagree
Neither Agree no	Disagree r Disagree
Strongly Agr	Agree
38. Feel they play an important part in accomplishing the unit's mission.	00000
39. Feel proud to be members of the unit.	dodoo
40. Know what is expected of them.	00000
 Are satisfied with the time available for family, friends, and personal needs. 	poooo
42. Are satisfied with unit social events.	
43. Feel they are serving their country.	
44. Have opportunities to better themselves.	
 Know the behaviors that will get them in trouble or punished. 	00000
In my platoon(s), Soldiers	
 Support Army values of loyalty, duty, respect, selfless service, honor, integrity, and personal courage. 	00000
47. Trust each other.	dodod
48. Care about each other.	dodolo
49. Trust their Leaders.	dodod
50. Care about their Leaders.	00000
51. Work well together to get the job done.	00000
52. Work well as a team.	opopo
 Can get help from their Leaders on personal problems. 	00000
54. Train well together with their Leaders.	00000
Feel they play an important part in accomplishing the unit's mission.	00000
56. Feel proud to be members of the unit.	
57. Know what is expected of them.	00000
58. Are satisfied with the time available for family, friends, and personal needs.	00000
59. Are satisfied with unit social events.	00000
60. Feel they are serving their country.	
61. Have opportunities to better themselves.	00000
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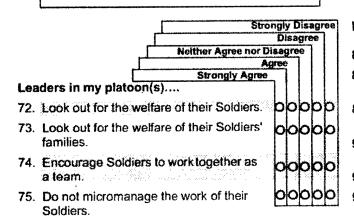
62. Know the behaviors that will get them in

trouble or punished.

 IF YOU ARE A COMPANY/BATTERY/TROOP COMMANDER, XO, 1SG, PLATOON LEADER OR PLATOON SERGEANT, THEN CONTINUE WITH QUESTIONS 63, OTHERWISE SKIP TO QUESTION 72.



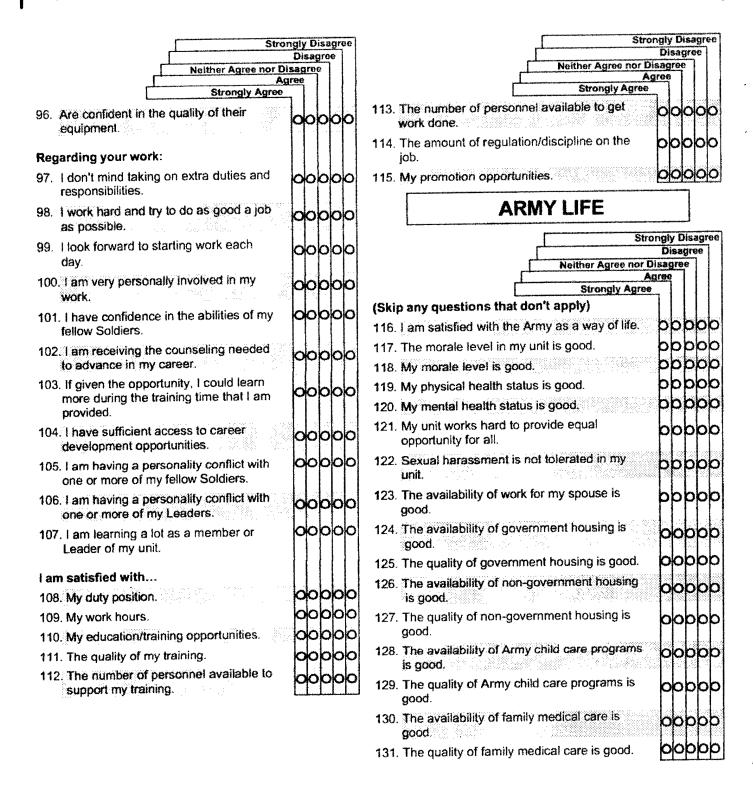
LEADERSHIP



Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree 76. Act friendly and approachable. 0000 77. Settle conflicts when they occur. dolololo dolololo 78. Show they know Army tactics and doctrine. 79. Work hard and try to do as good a job as 80. Pull their share of the load in the field. 81. Maintain high standards for unit olololo performance. 82. Show they are the kind of Leaders one would want to serve under in combat. 83. Keep subordinates well informed about what dololob is going on. 84. Keep informed about the training progress 0000 of their Soldiers. 85. Demonstrate they have the expertise to 0000 show their Soldiers how best to perform a 86. Listen well and care about what Soldiers say when they ask for help.

COMMAND CLIMATE

Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree In my platoon(s), Soldiers.... 87. Are given a lot of responsibility for their work. 00000 88. Are encouraged to do things on their own even if they sometimes make mistakes. 89. Get Leader feedback on how well they are alalalala doing. 90. Feel that the emphasis is on getting things right, and not just on looking good. 91. Can admit their mistakes. 92. Feel Leaders have confidence that their Soldiers will do their jobs right. 93. Are provided with guidance when assigned new duties. 94. Are satisfied with the quality of their training. 95. Are currently prepared to accomplish their wartime mission.



ADDITIONAL COMMENTS

If you would like to make any comments on the topics of this survey or any other Army topics of interest to you and your family members, please write them in the space below.

If applicable, please indicate the question number to which your comment is related.

NOW PLEASE DO THE FOLLOWING:

- 1. Seal your completed survey into the envelope provided.
- 2 Print the first initial of your last name <u>and</u> the last 4 digits of your social security number on the front of the envelope.
- 3. Return the envelope to the unit POC responsible for survey collection.

THANK YOU FOR COMPLETING THIS SURVEY.

APPENDIX B

SURVEY OF 172nd STRYKER BRIGADE COMBAT TEAM PERSONNEL: BRIGADE AND BATTALION/SQUADRON

Survey Approval Authority: U.S. Army Research Institute for the Behavioral and Social Sciences

Survey Control Number: TAPC-ARI-AO-60-54

SURVEY OF 172nd STRYKER BRIGADE COMBAT TEAM PERSONNEL: BRIGADE AND BATTALION/SQUADRON

PURPOSE: This survey is designed to obtain personal and work-related information from 172nd Stryker Brigade Combat Team (SBCT) Leaders and Staff at the brigade and battalion/squadron level.

USES: Collected information will be used to evaluate potential benefits resulting from personnel stabilization under unit manning.

PRIVACY: Responses will be treated as strictly confidential. Only persons involved in collecting or preparing the responses for analysis will have access to completed surveys. Only group statistics will be reported.

PARTICIPATION: Survey participation is voluntary. You will not be penalized for failure to respond to any question. Your participation is encouraged, however, so that the data will be complete and representative of all participants.

AUTHORITY: Public Law 93-573, called the Privacy Act of 1974, requires that you be informed of the purpose and uses to be made of the information collected. The Department of the Army may collect the information requested in this survey under the authority of Title 10 United States Code, Section 2358.

MARKING INSTRUCTIONS

GENERAL INSTRUCTIONS

- Use either a No. 2 pencil or blue/black ink ballpoint pen.
- Make solid marks that fill the circle for your
- Cleanly erase any marks you want to change. Make no stray marks of any kind on the form.

Correct: • Incorrect: ජ්ර්රෙ

MARKING NUMBERS OR LETTERS

If you are asked to give numbers or letters for your answer by filling in a circle, record the numbers or letters in the boxes along side the grid. and then fill in the circles of the grid as shown below.

Examples

How many months have you been in this duty position?

(If your answer is 16 months, for example, you would write "16" in the boxes as shown and then darken the corresponding circles.)

1000000 600000000000

Prepared by:

U.S. Army Research Institute for the Behavioral and Social Sciences Reserve Component Training Research Unit 1910 University Drive Boise, ID 83706-0002

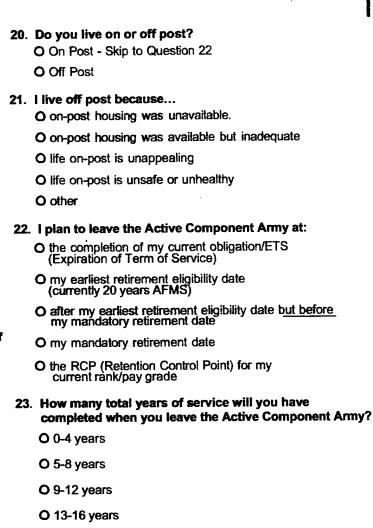
> Telephone: (208) 334-9390 E-Mail: rctru@ari.army.mil

> > June 2004 Group A Time 3

4th Last Digit 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	YOUR BA	CKGROUND
2. What are the last 4 digits of your Social Security Number? 4. h. last Digit	What is the first initial of your last name?	
2. What are the last 4 digits of your Social Security Number? 4th Last Digit 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
And Last Digit	2. What are the last 4 digits of your Social Security Number?	completed? O Some high school or less, but no diploma, certificate, or G
Bello O O O O O O O O O O O O O O O O O O	3rd Last Digit 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	O From 1 to 2 years of college, but no degree O Associate's degree
A Are you male or female? O Male O Female S. What was your age at your last birthday? O Under 20 O 20-24 years old O 30-34 years old O 35-39 years old O 45-49 years old O 45-49 years old O 55 or over A rey you Hispanic, Latino, or Spanish origin or ancestry (of any race)? MARK ALL THAT APPLY. O No, not of Hispanic, Latino, or Spanish ancestry O Yes, Mexican, Mexican American, Chicano O Yes, Cuban O Yes, Other Hispanic/Spanish 7. What is your race? MARK ALL THAT APPLY. O Asian (e.g.,Asian Indian, Chinese, Filipino, Japanese Korean, Wielnamese) O Hative Hawaiian or other Pacific Islander (e.g.,Samoan) A year or more of graduate credit, but no graduate degree O Master's degree O Doctorate degree O Professional degree, such as MD, DDS, or JD What is your marital status? O Single O Married O Divorced O Separated O Widowed Dependent children are UNMARRIED children, including adopted children or stepchildren, who: - Are not yet 21 years old; OR - Attend college and are not yet 23 years old; OR - Are not yet 21 years old; OR - Are of any age and have a mental or physical handicap AND WHO are legally dependent on you for over half of their support. 10. As defined above, how many dependent children are now living with you? O None O Two O Three or more 11. How many of your dependent children are now living with you? O None O Two O Two	3. What is your pay grade?	O From 3 to 4 years of college, but no degree
O Male O Female 5. What was your age at your last birthday? O Under 20 O 20-24 years old O 25-29 years old O 30-34 years old O 35-39 years old O 45-49 years old O 45-49 years old O 50 or over 6. Are you Hispanic, Latino, or Spanish origin or ancestry (of any race)? MARK ALL THAT APPLY. O No, not of Hispanic, Latino, or Spanish ancestry O Yes, Mexican, Mexican American, Chicano O Yes, Cuban O Yes, other Hispanic/Spanish 7. What is your marital status? O Single O Married O Divorced O Separated O Widowed Dependent children are UNMARRIED children, including adopted children or stepchildren, including adopted children or stepchildren, who: - Are not yet 21 years old; OR - Are of any age and have a mental or physical handicap AND WHO are legally dependent on you for over half of their support. 10. As defined above, how many dependent children do y have? O None - Skip to Question 12 O One O Two O Three or more 11. How many of your dependent children are now living with you? O None O One O Diack or African American O Native Hawaiian or other Pacific Islander (e.g., Samoan		O A year or more of graduate credit, but no graduate degree O Master's degree
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AND WHO are legally dependent on you for over half of their support. AND WHO are legally dependent on you for over half of their support. 10. As defined above, how many dependent children do y have? O Yes, Mexican, Mexican American, Chicano O Yes, Puerto Rican O Yes, Cuban O Yes, other Hispanic/Spanish 7. What is your race? MARK ALL THAT APPLY. O American Indian or Alasken Native (e.g., Eskimo, Aleut) O Asian (e.g., Asian Indian, Chinese, Filipino, Japanese Korean, Vietnamese) O Black or African American O Native Hawaiian or other Pacific Islander (e.g., Samoan)	O 50 or over	years old; OR - Are of any age and have a mental
O No, not of Hispanic, Latino, or Spanish ancestry O Yes, Mexican, Mexican American, Chicano O Yes, Puerto Rican O Yes, Cuban O Yes, other Hispanic/Spanish O Matis your race? MARK ALL THAT APPLY. O American Indian or Alasken Native (e.g.,Eskimo, Aleut) O Asian (e.g.,Asian Indian, Chinese, Filipino, Japanese Korean, Vietnamese) O Black or African American O Native Hawaiian or other Pacific Islander (e.g.,Samoan)	6. Are you Hispanic, Latino, or Spanish origin or ancestry (of any race)? MARK ALL THAT APPLY.	AND WHO are legally dependent on you for
O Yes, Puerto Rican O Yes, Cuban O Yes, other Hispanic/Spanish 7. What is your race? MARK ALL THAT APPLY. O American Indian or Alasken Native (e.g., Eskimo, Aleut) O Asian (e.g., Asian Indian, Chinese, Filipino, Japanese Korean, Vietnamese) O None - Skip to Question 12 O One O Two O Two O Three or more 11. How many of your dependent children are now living with you? O None O None O One O None O Two	O No, not of Hispanic, Latino, or Spanish ancestry	10. As defined above, how many dependent children do yo
O Yes, Puerto Rican O Yes, Cuban O Yes, other Hispanic/Spanish O Two O Three or more 7. What is your race? MARK ALL THAT APPLY. O American Indian or Alasken Native (e.g.,Eskimo, Aleut) O Asian (e.g.,Asian Indian, Chinese, Filipino, Japanese Korean, Vietnamese) O None O None O None O Two O Two O Two	O Yes, Mexican, Mexican American, Chicano	
O Yes, Cuban O Yes, other Hispanic/Spanish O Two O Three or more 7. What is your race? MARK ALL THAT APPLY. O American Indian or Alasken Native (e.g.,Eskimo, Aleut) O Asian (e.g.,Asian Indian, Chinese, Filipino, Japanese Korean, Vietnamese) O One O Two O None O One O Two O Two O Two	O Yes, Puerto Rican	O None - Skip to Question 12
O Two O Yes, other Hispanic/Spanish 7. What is your race? MARK ALL THAT APPLY. O American Indian or Alasken Native (e.g.,Eskimo, Aleut) O Asian (e.g.,Asian Indian, Chinese, Filipino, Japanese Korean, Vietnamese) O Two O None O One O Two		O One
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O American Indian or Alasken Native (e.g.,Eskimo, Aleut) O Asian (e.g.,Asian Indian, Chinese, Filipino, Japanese Korean, Vietnamese) O Black or African American O Native Hawaiian or other Pacific Islander (e.g.,Samoan		
Aleut) O Asian (e.g.,Asian Indian, Chinese, Filipino, Japanese Korean, Vietnamese) O Black or African American O Native Hawaiian or other Pacific Islander (e.g.,Samoan		
O Black or African American O Native Hawaiian or other Pacific Islander (e.g.,Samoan	Aleut) O Asian (e.g.,Asian Indian, Chinese, Filipino, Japanese	
O Native Hawaiian or other Pacific Islander (e.g.,Samoan		O One
O Native Hawaiian or other Pacific Islander (e.g., Samban Guamanian, Chamarro) O Three or more		
O White	Guamanian, Chamarro)	O Three or more

	3503469820
12.	The 172nd Separate Infantry Brigade officially converted to the 172nd SBCT in October 2003. How many months have you been a member of the 172nd SBCT?
13.	To what 172nd SBCT unit are you assigned? O 172nd Headquarters and Headquarters Company O 172nd Brigade Support Battalion O 4-14th Cavatry Squadron O 1-17th Infantry Battalion O 4-11th Field Artillery Battalion O 4-23rd Infantry Battalion O 2-1st Infantry Battalion
14.	How many full months have you been a member of this unit?
15.	What is your current duty position?
	O Brigade Leader (CDR, DCO, CSM, XO)
	O Brigade Staff Officer/Warrant Officer
	O Brigade Staff NCO
	O Battalion/Squadron Leader (CDR,CSM, XO)
	O Battalion/Squadron Staff Officer/Warrant Officer
	O Battalion/Squadron Staff NCO
16.	How many full months have you been in this duty position?
17.	Have you changed duty positions in the last 6 months?
	O Yes
	O No
18.	Were you a member of the 172nd Separate Infantry Brigade before joining the 172nd SBCT?
	O Yes
	O No
	How did you become a 172nd SBCT mber? O Volunteered

O Assigned



Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree 24. I think the goal of stabilizing Soldiers in the 172nd SBCT is a good idea. 25. I think the goal of stabilizing Leaders in OOOOC

STABILIZATION

the 172nd SBCT is a good idea.

26. I would not switch to a non-stabilized unit in the same Alaska location if given the opportunity.

O 17-20 years
O 20+ years

FROM YOUR PERSPECTIVE Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree The following support the Army values of loyalty, respect, selfless service, honor, integrity, and personal courage: 27. Brigade Leaders (CDR, DCO. 00000 CSM, XO). 28. Brigade Staff Members. 29. Battalion/Squadron Leaders (CDR, CSM, XO). 30. Battalion/Squadron Staff Members 31. Company/Battery/Troop Leaders alalala (CDR, 1SG, XO). The following set the example for these values: 32. Brigade Leaders. 33. Brigade Staff Members. 0 34. Battalion/Squadron Leaders. 0 35. Battalion/Squadron Staff Members. 0 OlOlO dolololo 36. Company/Battery/Troop Leaders. Brigade Leaders trust... 37. Each other. 38. Brigade Staff Members. 39. Battalion/Squadron Leaders. 40. Battalion/Squadron Staff Members. 41. Company/Battery/Troop Leaders. Brigade Leaders care about... 00000 42. Each other. 43. Brigade Staff Members. 44. Battelion/Squadron Leaders. 45. Battalion/Squadron Staff Members. olololo 46. Company/Battery/Troop Leaders. Brigade Staff Members trust... 00000 47. Each other. 48. Brigade Leaders. dolo 49. Battalion/Squadron Leaders. 50. Battalion/Squadron Staff Members. 51. Company/Battery/Troop Leaders.

Stro	ngly Dir Disag	
Neither Agree nor D		7
Strongly Agree	jree	
Brigade Staff Members care about	1	
52. Each other,	dok	olok
53. Brigade Leaders.	ook	ook
54. Battalion/Squadron Leaders.	dok	ook
55. Battalion/Squadron Staff Members.	ook	doc
56. Company/Battery/Troop Leaders.	dok	ooc
Battalion/Squadron Leaders trust 57. Each other.	ook	000
57. Each other. 58. Brigade Leaders.	ook	1 1111
59. Brigade Staff Members.	dok	
60. Battalion/Squadron Staff Members.	dok	1 1
61. Company/Battery/Troop Leaders.		doc
61. Company/battery/1100p ceasers.	M	
Battalion/Squadron Leaders care about		
62. Each other.	dok	
63. Brigade Leaders.		000
64. Brigade Staff Members.	dok	1 8 1
65. Battalion/Squadron Staff Members.	al and make	
66. Company/Baltery/Troop Leaders.	dok	OOC
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67. Each other.	dok	OOC
68. Brigade Leaders.	OOK	
69. Brigade Staff Members.	1 1	OOC
70. Battalion/Squadron Leaders.		OOC
71. Company/Battery/Troop Leaders.	ook	OOC
Battalion/Squadron Staff Members		
care about		
72. Each other.	1 1 1	OOC
73. Brigade Leaders.		000
74. Brigade Staff Members.		
75. Battalion/Squadron Leaders.	1 1 1	
76. Company/Battery/Troop Leaders.	Y	900
Brigade Leaders work well with the following to get the job done:		
77. Each other	do	ooc
78. Brigade Staff Members.	00	ooc
79. Battalion/Squadron Leaders.	do	000
80. Battalion/Squadron Staff Members.	do	000

Stro	ngly Disagree Disagree	Strongly Disagr	ree
Neither Agree nor D	* : :	Disagree	1
Strongly Agree	gree	Neither Agree nor Disagree	
Brigade Staff Members work well with	7	Strongly Agree	
the following to get the job done:		104. Are satisfied with the time available for family, friends, and personal needs.	·b
81. Each other.	dodoo	105. Are satisfied with the social events	o
82. Brigade Leaders.	poppo	J Sportosi od O) m.j U	
83. Battalion/Squadron Leaders.	dodoo		P
84. Battalion/Squadron Staff Members.	oopop	107. Have opportunities to better themselves.	פי
Battalion/Squadron Leaders work well with the following to get the job done:		LEADERSHIP	
85. Each other.	00000	ANSWER THE FOLLOWING	
86. Brigade Leaders.	dodod	QUESTIONS WITH RESPECT TO YOUR DUTY POSITION LEVEL.	
87. Brigade Staff Members.	00000	10 TOOK DOTT TOOTHON EEVEE.	ee
88. Battalion/Squadron Staff Members.	00000	Disagree	11
oo. Dattailon/Squadron Stan Members.		Neither Agree nor Disagree Agree	
Battalion/Squadron Staff Members work		Strongly Agree	
well with the following to get the job done:		Leaders of my brigade or battalion/squadron	
89. Each other.	00000		oc
90. Brigade Leaders.	90000		
91. Brigade Staff Members.	00000	1 Manual and Samultina 1111	70
92. Battalion/Squadron Leaders.	00000	110. Encourage Staff Members to work together	Oc
The following have the skills and abilities		es a team.	
to lead Soldiers in combat:		111. Do not micromanage the work of their Staff Members.	71
93. Brigade Leaders.	OOOOO	· · · · · · · · · · · · · · · · · · ·	W
94. Brigade Staff Members.	00000		
95. Battalion/Squadron Leaders.	dololo	A CONTROL OF THE SECOND PROPERTY OF THE SECON	asle al
96. Battalion/Squadron Staff Members.	00000		-1 1
97. Company/Battery/Troop Leaders.	dololo	The state of the s	
The following help their Staff Members		116. Show they are the kind of Leaders one would want to serve under in combat.	OK
with personal problems when asked:		117. Keep Staff Members well informed about	oc
98. Brigade Leaders.	oppop	what is going on.	11
99. Battalion/Squadron Leaders.	poppp	118. Keep informed about the training progress of their Staff Members.)(
ANSWER THE FOLLOWING QUESTIONS WITH RESPECT TO YOUR DUTY POSITION LEVEL.		119. Demonstrate they have the expertise to show their Staff Members how best to perform a task.	oc
Other Leaders/Staff Members in my brigade or battalion/squadron		120. Listen well and care about what Staff Members say when they ask for help.	b
100. Feel that they play an important part in accomplishing my unit's mission.	poppo		
101. Are proud to be members of my unit.	poppp		
102. Know what is expected of them.	oopop	<i>y</i>	
103. Are well aware of the behaviors that will get them into trouble.	00000		
·		MANA	ł

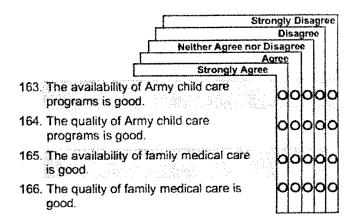
COMMAND CLIMATE

 ANSWER THE FOLLOWING QUESTIONS WITH RESPECT TO YOUR DUTY POSITION LEVEL.

ı	RESPECT TO YOUR DUTY POSITION LEV	VE	L.			
	Stron		/ D			æ
	Neither Agree nor Dis	ac				
	Strongly Agree	,				
	f Members in my brìgade attalion/squadron					
	Are given a lot of responsibility for their work.	þ	0	0	0	0
122.	Are encouraged to do things on their own even if they sometimes make mistakes.	b	o	O	О	٥
	Get leader feedback on how well they are doing.	b	þ	٥	٥	0
124.	Feel that the emphasis is on getting things right, and not just on looking good.	þ	þ	b	0	0
125.	Can admit their mistakes.	b	0	0	0	0
126.	Feel Leaders have confidence that their Staff Members will do their jobs right.	þ	o	0	0	0
	Are provided with guidance when assigned new duties.	þ	0	٥	0	0
128.	Are satisfied with the quality of their training.	þ	0	O	0	0
129.	Are currently prepared to accomplish their wartime mission.	b	þ	þ	D	0
130.	Are confident in the quality of their equipment.	þ	0	þ	O	0
brig	arding your work as a ade/battalion/squadron Leader or ff Member:					
131.	I don't mind taking on extra duties and responsibilities.	þ	0	0	0	0
132.	. I work hard and try to do as good a job as possible.	þ	0	þ	þ	0
	I look forward to starting work each day.	þ	O	þ	0	0
134.	. I am very personally involved in my work.	þ	0	þ	O	0
135	. I have confidence in the abilities of my Leaders.	b	0	þ	þ	0
136	I have confidence in the abilities of my Staff Members.	þ	0	þ	þ	0
137	I am receiving the counseling needed to advance in my career.	b	0	þ	o	0
138	. If given the opportunity, I could learn more during the training time that I am provided.	þ	0	b	þ	0

S(tr	ongly Disagree
Neither Agree nor I	Disagree Disagree
	<u>lgree</u>
Strongly Agree	-
139. I have sufficient access to career development opportunities.	plopolo
140. I am having a personality conflict with one or more of my Leaders.	popoo
141. I am having a personality conflict with one or more of my Staff Members.	popoo
142. I am learning a lot as a member or leader of my unit.	00000
I am satisfied with	
143. My duty position.	popop
144. My work hours.	00000
145. My education/training opportunities.	00000
146. The quality of my training.	00000
147. The number of personnel available to support my training.	opopo
148. The number of personnel available to get work done.	00000
149. The amount of regulation/discipline on the	لماملماما
 200 (200 (200 (200 (200 (200 (200 (200	pololo
job.	00000
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job. 150. My promotion opportunities. ARMY LIFE	
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162. The quality of non-government housing is good.



ADDITIONAL COMMENTS

If you would like to make any comments on the topics of this survey or any other Army topics of interest to you and your family members, please write them in the space below.

If applicable, please indicate the question number to which your comment is related.

NOW PLEASE DO THE FOLLOWING:

- 1. Seal your completed survey into the envelope provided.
- 2 Print the first initial of your last name <u>and</u> the last 4 digits of your social security number on the front of the envelope.
- 3. Return the envelope to the unit POC responsible for survey collection.

THANK YOU FOR COMPLETING THIS SURVEY.